STORAGE CODE

Edison Stoccaggio S.p.A.

EDISON

STORAGE CODE

VERSION 14.

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CONTENTS

INTRODUCTION TO THE DOCUMENT

The purpose of this Storage Code is to provide Requesting Users with access to one or more storage services offered by the Storage Company, in accordance with Article 12 Paragraph 2 of Italian Legislative Decree no. 164 of 23 May 2000.

The Storage Company has prepared its own Storage Code considering the specific features of the System it manages.
The storage reservoirs comprised in the System managed by Edison Stoccaggio are currently undergoing development and flow regulation works, as described in Paragraph 2.1 of the Chapter “Description of the Storage Facilities and of their Operation”. The work is carried out adopting the most up to date technical-economic criteria.

I.1 CONTRACTUAL PROVISIONS

Subject to the prescriptions of the law, the provisions contained in the Storage Code constitute the set of the Parties’ rights and obligations in relation to the performance of storage services on the System managed by the Storage Company.

The Storage Company and the Shipper mutually undertake to comply with said rights and obligations, by virtue of the execution of the Storage Contract.

For all matters not expressly regulated by the Storage Contract, reference shall be made to the provisions of the Storage Code whose rules, insofar as they are applicable, shall be an integral and substantial part of each Contract.

If one of the provisions contained in this Storage Code should be found to be impracticable or should become so, the Storage Company hereby reserves the right to replace it with a new provision, as established in the Chapter “Revision of the Storage Code”.

THE INVOLVED OPERATORS AND OTHER PARTIES

Definition:	Description
Authority	The Authority for Electricity, Gas and Water, established with Italian Law no. 481 of 14 November 1995, is an independent body and it regulates and controls public utility services in the sectors of electricity, gas and water services.
GME	Gestore dei Mercati Energetici S.p.A.
Storage Company	Edison Stoccaggio S.p.A., which provides the Storage Service, managing in an integrated manner the storage concessions it holds.
Transport Company	The company S.G.I. S.p.A. (Società Gasdotti Italia S.p.A.).
Major Storage Company	The company Stogit. S.p.A. (Stoccaggi Gas Italia S.p.A.).
Major Transport Company	The company Snam Rete Gas S.p.A.
MSE	Italian Ministry of Economic Development (*Ministero dello Sviluppo Economico*)
Shipper	A user of the gas system that purchases storage Capacity for its own use or for sale to others and that stipulates a Storage Contract with Edison Stoccaggio S.p.A.
UNMIG	Italy's National Office for Hydrocarbons and Geothermal Energy, which operates within the General Directorate for Energy and Mining Resources of the Ministry of Economic Development; it performs the following duties: • Enforcing the regulations and managing the administrative procedures that govern the assignment of mining rights and the consequent research and exploitation activity; • Approving plans and operations and carrying out inspections thereon.

CHAPTER 1

REGULATORY FRAMEWORK

1.1 EUROPEAN COMMUNITY REGULATIONS

1.1.1 *Directive 2009/73/EC - Concerning common rules for the internal market in natural gas and repealing Directive 2003/55/EC*

Directive 2009/73/EC of the European Parliament and of the Council of 13 July 2009 concerns common rules for the internal market in natural gas and repeals Directive 2003/55/EC

Directive 2009/73/EC, defining common rules for the transmission, distribution, supply and storage of natural gas, continued the process for completing the European energy market through the progressive liberalisation of the gas market.

The new Directive lays down the rules relating to the organisation and functioning of the natural gas sector, access to the market, the criteria and procedures applicable to the granting of authorisations for transmission, distribution, supply and storage of natural gas and the operation of systems.

Article 13 of the Directive indicates the tasks of the transmission, storage and/or LNG system operators:

- To operate, maintain and develop under economic conditions secure, reliable and efficient facilities, to secure an open market, with due regard to the environment;
- To refrain from discriminating between users;
- To provide any other transmission, storage or LNG system operator and/or any distribution system operator, with sufficient information to ensure that the transport and storage of natural gas may take place in a manner compatible with the secure and efficient operation of the interconnected system;
- To provide system users with the information they need for efficient access to the system.

In relation to the performance of the gas balancing service, Directive 2009/73/EC required the establishment of a non-discriminatory, cost-reflective methodology. These objectives are pursued by the national regulatory Authorities.

Article 33 of the Directive regulates access to storage: Member States may choose either a negotiated access procedure or a regulated access procedure, or both. Those procedures shall operate "in accordance with objective, transparent and non-discriminatory criteria".

- In the case of negotiated access, Member States or, where Member States have so provided, the regulatory authorities shall take the necessary measures for natural gas companies and eligible customers, either inside or outside the territory covered by the interconnected system, to be able to negotiate access to storage facilities and line pack, when technically and/or economically necessary for providing efficient access to the system, as well as for the organisation of access to other ancillary services. The parties shall be obliged to negotiate access to storage, line pack and other ancillary services in good faith;
- In the case of regulated access, the regulatory authorities where Member States have so provided or Member States shall take the necessary measures to give natural gas companies and eligible customers either inside or outside the territory covered by the interconnected system a right to access to storage, line pack and other ancillary services, on the basis of published tariffs and/or other terms and obligations for use of that storage and line pack, when technically and/or economically necessary for providing efficient access to the system, as well as for the organisation of access to other ancillary services. The right of access for eligible customers may be given by enabling them to enter into supply contracts with competing natural gas companies other than the owner and/or operator of the system or a related undertaking.

1.1.2 *Regulation (EU) No. 994/2010 concerning measures to safeguard security of gas supply*

The new Regulation, entered into force in all Member States with the publication in the official Journal of the European Union in November 2010, reformed the regulations governing the security of gas supplies indicating roles and responsibilities at the national and Community level between the competent authorities and market operators. The goal is to improve the ability to respond to crises by preparing National Preventive Action and Emergency Plans (Community-wide Plans may also be established), defined according to shared standards introduced at the Community level and supply risk assessments.

1.2 DOMESTIC REGULATIONS

1.2.1 *Italian Legislative Decree no. 164 of 23 May 2000 - Implementation of Directive 98/30/EC*

Italian Legislative Decree no. 164/00 (known as the "Letta Decree"), transposing Directive 98/30/EC, launched the reorganisation of the natural gas market in Italy. This decree promoted the development of competition, regulating the times and methods of implementation.
The objective is to offer End Customers a service at ever more competitive prices, promoting on one hand the presence of multiple operators in Gas supply and on the other stimulating consumption.

Italian Legislative Decree no. 164/00 prescribes, in particular, that:

- the activity of storing gas in reservoirs is carried out under concession, with a validity of no more than twenty years, granted by the Ministry of Industry (currently, the Ministry of Economic Development);
- the storage activity is subject to corporate separation from every other activity in the gas sector, with the exclusion of the transport and dispatching activities, for which in any case accounting and managerial separation is required;
- each holder of multiple concessions is obligated to manage in a coordinated and integrated manner the set of the working gas storage capacities available to it;
- holders of natural gas storage concessions have to obligation to secure and provide hydrocarbon storage, strategic storage and modulation services to users that request them provided that the system they use has suitable capacity and provided that the services requested by the user are technically and economically achievable according to criteria established by a decree of the Italian Ministry of Industry;
- the Authority for electricity and gas shall set, by a resolution, the access criteria and priorities to assure that all users have freedom of access at equal conditions, the utmost impartiality and neutrality of the storage service under conditions of normal operation and the obligations of the parties that perform the storage activities.
  No later than three months from the publication of the aforesaid resolution, the involved parties shall adopt their own storage code, which is transmitted to the Authority that shall verify its compliance with the promulgated criteria;
- Available storage shall be destined on a priority basis to the needs of the exploitation of gas reservoirs in the territory of Italy;

- Strategic storage shall be under the responsibility of the entities that import natural gas from Countries not belonging to the European Union;
- Modulation storage, the service directed at enabling to modulate gas delivery according to daily, seasonal and peak consumption trends, shall be under the responsibility of entities exercising the sale activity.
- Until 31 December 2000, the tariffs for the hydrocarbon, modulation and strategic storage activity shall be determined by the storage companies on a transitional basis. Thereafter, the Authority shall determine the tariffs taking into account the need not to penalise the areas of the Country with less advanced infrastructure, to incentivise investments to enhance storage capacity, taking into account the particular risk associated with mining activities and gas immobilisation to secure peak performance.

Other significant issues within the Decree are as follows:

Use of strategic storage by transport companies
The Legislative Decree assigns to the companies that carry out transport and dispatching activities (or that regulate natural gas flows and the ancillary services needed for the operation of the system, including modulation) the responsibility, on the basis of Ministry of Industry directives, for using, in case of need, the strategic gas storage directly connected with their respective network, subject to their timely replenishment by the responsible parties.

Incentives for the conversion to storage of reservoirs at an advanced exploitation stage
The Legislative Decree provides measures to incentivise the conversion to natural gas storage of reservoirs at an advanced exploitation stage, in order to assure a higher degree of security of the national gas system. Starting from 1 January 2000, 5% of the revenues deriving from payment of exploitation duties shall be allocated to a contribution to holders of exploitation or storage concessions in an amount not exceeding 40% of documented costs for the conduct of studies, analyses, injection tests aimed at ascertaining the suitability of the reservoir to the storage activity or to the expansion of storage capacity.

Conversion to storage of reservoirs at an advanced exploitation stage
If the Ministry deems conversion to natural gas storage of reservoirs at an advanced exploitation stage to be possible, after consultation with the technical committee for hydrocarbons and geothermal energy, it shall publish the information received in this regard in the official bulletin of hydrocarbons and geothermal energy, setting a term for the submission by the competing involved parties, that fulfil legal requirements, of applications for obtaining a storage concession. In case of competition between multiple applications, the concession is granted, after obtaining the opinion of the technical committee

for hydrocarbons and geothermal energy, applying objective, non-discriminatory selection criteria and after payment of adequate consideration to the holder of the related exploitation concession.

1.2.2 *The Ministerial Decree 9/05/2001 – Criteria that make the storage service technically and economically feasible*

Ministerial Decree no. 9/05/2001 establishes:

1. The criteria according to which the hydrocarbon, strategic and modulation storage services are considered technically and economically feasible;
2. The methods for communicating to the Ministry, by the holders of exploitation concessions, of the available storage capacities necessary to modulate the production deriving from the reservoirs under concession;
3. The limits and technical rules to regulate the recognition of the strategic modulation storage capacities, also in relation to the peak capacities of the storage;
4. The transitional directives to assure the start of the filling cycle of domestic storage, in order to safeguard the secure operation of the system and the customers' modulation needs.

In particular, with regard to hydrocarbon storage, the main provisions contained in the decree are set out below.

To identify the availability of hydrocarbon storage necessary for production, holders of exploitation concessions, depending on expected production and their contractual commitments to supply the produced gas, may request a hydrocarbon storage performance calculated in the following way:

a) the period of time over which the storage service is expected to be used, which may not be shorter than 120 days, corresponding to the seasonal peak period;
b) the ratio between the average daily flow rate on an annual basis, referred to the total production originating from the concessions of a same holder, and the flow rate equivalent to the sum of the maximum daily quantities to be withdrawn according to each supply contract, defined as "load factor", shall be no lower than the average modulation assured by the import contracts in force in the reference year, published each year by the Ministry of Industry, Commerce and Crafts in the official bulletin of hydrocarbons and geothermal energy;
c) the difference between the two flow rates defined in the previous point determines the maximum daily flow rate that can be requested as hydrocarbon storage, which, multiplied by the seasonal peak period per

letter a), represents the maximum working gas space that can be requested as hydrocarbon storage;

d) in addition to the value per letter c), to secure the continuity of the supply in case of unforeseen production interruptions, each holder of one or more exploitation concessions may request, during the storage withdrawal phase, an additional service, for up to 8 days in total, corresponding to the maximum production capacity of the holder associated with a single treatment station, to be indicated when submitting the request. The daily flow rate is defined as the production forecast for the next calendar year of the treatment station indicated, divided by the number of days in the year.

The Minister shall verify the data provided by the holders of production concessions and communicates them to the Authority for electricity and gas, which in turn allocates the hydrocarbon storage service relating to the subsequent injection phase among the companies that hold storage concessions in Italy.

Holders of storage concessions, based on the aforementioned data, assign the injection capacity for hydrocarbon storage to holders of exploitation concessions, who shall provide storage companies with the following information:

1. the injection flow rate, expressed in terms of volume of gas measured at standard conditions in a unit of time;
2. the space to be reserved in storage, referred to the volumes of gas to be injected at standard conditions;
3. the higher heating value of the gas delivered for injection into storage, at standard conditions;
4. the Wobbe index of the gas delivered for injection into storage;
5. other parameters relating to the quality of the gas, knowledge whereof may promote the preparation of efficient plans for the operation of the storage system.

1.2.3 *The Ministerial Decree of 26 September - Determination of strategic storage*

Ministerial Decree no. 26/9/2001 establishes:

1. the methods for determining and withdrawing the strategic storage volumes;
2. the provisions for addressing any emergencies during the operation of the gas system;
3. transitional measures to secure the start of the 2001-2002 withdrawal phase of national storage.

With regard to the determination of the strategic storage, gas companies that intend to import gas during the next contractual storage year shall communicate to the MAP the import plans for each supply infrastructure, specifying the origin of the gas. The MAP shall determine the maximum flow rate relating to the largest of the imports originating from Countries outside the European Union, the availability that must be assured by the storage system and the corresponding necessary strategic storage volumes. The Ministry shall communicate said data to the Authority, which shall allocate the strategic storage service among the storage companies no later than the following 15 February.

No later than 1 March, the storage companies shall publish their availability of strategic storage and the conditions for access to said service.

No later than 15 March of each year, gas companies that intend to carry out, in the next contractual year, imports of gas produced in Countries outside the European Union, shall stipulate a contract with the storage companies for the availability of strategic storage according to the gas volumes to be imported.

The withdrawal of the strategic storage is generally carried out in the following cases:

interruption or reduction of imports from non-EU Countries;
interruption or reduction of imports from EU Countries and emergencies on the domestic gas pipeline network;
globally cold winter season.

The Ministerial Decree also establishes a Technical Committee for Emergency and Monitoring, with the task of formulating proposals for the definition of possible emergency situations, identifying instruments for intervention, carrying out periodic monitoring.

1.2.4 *Italian Law no. 239 of 23 August 2004 - Reorganisation of the energy sector*

The Marzano Law, “Reorganisation of the energy sector and delegation of powers to the Government for the reorganisation for the current provisions on energy” identifies, among the duties of the State in the natural gas sector:

- The adoption of guidelines to undertakings that carry out transport and dispatching activities on the domestic network and regasification of natural gas and of provisions for the purposes of the utilisation, in case of need, of

strategic storage, and the stipulation of the related conventions and the setting of rules for dispatching in emergency conditions and of security obligations;
- The decisions pertaining to the storage of natural gas in reservoirs;
- The adoption of guidelines for safeguarding the continuity and security of supplies, for the coordinated operation of the storage system and for reducing the vulnerability of the domestic natural gas system.

With specific regard to the storage activity, the most significant points are as follows:

- The underground storage of hydrocarbons is confirmed to be attributed in concession according to the provisions of law
- To assure "the security, flexibility and continuity of energy supplies", Article 17 provides for "parties that invest (...) in the construction (...) of new underground storage of natural gas, or in significant enhancements of the capacity of existing infrastructure (...), the possibility of requesting exemption from the rules that provide for third parties' access rights for newly constructed capacity. The exemption is granted, on a case by case basis, for at least twenty years and for at least 80 percent of new capacity, by the Ministry of Productive Activities, taking into consideration the opinion of the Authority for electricity and gas". The residual portion of the new storage capacity is allocated according to procedures defined by the Authority, based on criteria of efficiency, cost-effectiveness and safety of the system.
- Holders of underground natural gas storage concessions may not be granted more than two ten-year extensions, if they have carried out the storage plans and fulfilled all obligations deriving from said concessions.

1.2.5 *Decree of 21 January 2011 - Methods for assigning the underground natural gas storage concession and related bill*

The Decree describes the methods for assigning a storage concession, specifying the duration of the concession, the methods for granting any extensions, invalidity and termination of the concession and any new methods for its attribution. All aspects tied to the management of a storage concession are contained in a subsequent Directorial Decree.

1.2.6 *Directorial Decree of 4 February 2011*

The Directorial Decree establishes the operating procedures for implementing the Ministerial Decree of 21 January 2011 and the methods for performing storage and control activities.
In particular, the instruction contains the following significant points:

- to overcome the original pressure, the MSE may authorise injection tests, provided they are compatible with the geo-mechanical characteristics of the reservoir;
- possibility to re-process existing seismic surveys as an alternative to 3D seismic mapping. However, the MSE may impose 3D seismic surveying if it deems it necessary;
- the Ministry may authorise extensions to other parties of the title to storage concession applications after verifying their technical, economic and organisational capabilities;
- insertion of the obligation to prove the stable and actual employment, within the workforce of the user requesting the storage concession, of 4 professionals: person in charge of geology, of the reservoirs, of operating management and of the environment and safety;

1.2.7 *Resolution no. 120/01*

Resolution no. 120/01 sets the criteria for determining transport tariffs.
It included a revenue (RA) equal to the cost for balancing the system among the revenues recognised to the Transport Company. According to Article 9 of the Resolution, transport companies communicate, taking into account the portion of end customers connected to the portion of network available to each:

- the storage gas injection, withdrawal and volume requirements needed for balancing the system;
- the storage gas injection, withdrawal and volume requirements needed to assure, for ineligible customers directly or indirectly connected to its networks, the availability of the seasonal modulation services and of seasonal and daily peaks adequate to the demand of one year with rigid winter with twenty-year frequency, per Article 18, Paragraph 1, of Italian Legislative Decree no. 164/00.

The cost of the balancing service is calculated on the basis of the tariffs of the storage services and it constitutes the RA revenue.

Article 17 of Resolution no. 137/02, in establishing the balancing costs, allows the User "for the purposes of its own balancing", to delegate the transport company to make use of any storage capacity assigned to it.

1.2.8 *Resolution no. 26/02*

Resolution no. 26/02 of the Authority for electricity and gas defined the criteria for determining the tariffs and their revision for undertakings that perform the site storage service with maximum pressure equal to or greater than 90 percent of the initial pressure.
Resolution no. 26/02 also defined:

- the regulated cyclic modulation service through four specific elements (availability of service to be assigned according to priorities set by the Authority; continuous basis and duration equal to one Thermal Year; two phases, distinguished on a seasonable basis, of injection and withdrawal; compliance, during the withdrawal phase, of "determined proportions of daily peak and residual gas volumes");
- the provisional rules for the assignment of capacity and for balancing;
- the recognition that companies which operate sites that are not yet fully operational and to companies that start a storage service through new sites are entitled to opt for tariff freedom, in order to incentivise the readying of new storage reservoirs and of innovative types of service.

New storage sites or sites not yet fully operational
Companies that start the storage service through new sites or that perform the storage service in sites with a maximum pressure lower than 90% of the initial pressure are entitled to request the Authority to determine the tariffs for each individual site, on the basis of the data resulting from the financial statements for the year preceding the thermal year of application of the tariff, of the price for the attribution of the storage concession and of the capacities declared by the company.
Storage companies that do not exercise the aforesaid right shall set and publish the tariffs for three years starting from the first thermal year after the date of initial operation of the site and, in the case of sites active on the date of entry into force of the resolution and not yet fully operational, until the end of the first regulatory period.

1.2.9 *Resolution no. 119/05*

Implementing Article 12 Paragraph 7 of Italian Legislative Decree no. 164/00, the Authority for electricity and gas published Resolution no. 119/05 on 24

June 2005. The document defines “the conditions capable of assuring that all users of storage facilities have freedom of access at equal conditions, the utmost impartiality and neutrality of the storage service under conditions of normal operation and the obligations of the parties that perform the storage activities.”

In particular, the Resolution:

- prescribes the storage companies’ obligations of disclosure to the Authority;
- defines the services that the storage company has the obligation to provide;
- provides the possibility for the storage company to offer different services from the mandatory ones;
- provides for the additional right, for company and users, to negotiate services with technical-economic conditions other than those defined in the code;
- provides for the offer of interruptible services;
- provides a procedure for assigning capacity in case of excess demand;
- defines a Storage Code outline;
- defines a procedure for the consultation of the involved parties.

1.2.10 *Resolutions no. 50/06 and 56/06*

Resolution no. 50/06 defines the criteria for determining the tariffs for the storage activity and the amendments and additions to resolution no. 119/05 and no. 166/05.

In particular, the Resolution:

- provides a single national tariff, together with an equalisation system that assures the recovery of the revenues recognised to each company in order to promote the enhancement and development of the new reservoirs and of existing infrastructure;
- defines the criteria for determining the revenues referred to the storage activity and the revenues related to new investments;
- defines the unit storage prices included in the tariff, revisions to revenues and tariffs and the process for the approval and publication of the tariffs;
- provides the amendments to Resolution no. 119/05 with regard to the mandatory services offered and the balancing and storage replenishment costs

Implementing Article 13 Paragraph 2 of Resolution no. 50/06, the Authority for electricity and gas published Resolution no. 56/06 on 16 March 2006. The document approved the single storage prices included in the tariff for the 2006-2007 thermal year.

1.2.11 *Resolution no. 72/09*

Resolution ARG/Gas 72/09, in accordance with the provisions tasking the Authority to determine the storage fees, initiated a process for the formation of measures pertaining to tariffs for the natural gas storage activities for the 2010-2014 regulatory period.

1.2.12 *Resolution ARG/gas 165/09 "Urgent measures for revising the rules for balancing and regulating natural gas storage services in accordance with Law Decree no. 78 of 1 July 2009"*

This measure proposes some solutions to revise the rules for balancing and for the offer of natural gas storage services.
The provisions are formulated with the major purpose of increasing available flexibility for the operators of the natural gas market, also through the improvement of the instruments for the exchange of storage capacity through competitive procedures and of natural gas. These measures are a part of the broader process of revision of the regulations, initiated by the Authority.

1.2.13 *Resolution no. 119/10*

After the consultations started in 2010, the Authority for energy approved the criteria for the definition of the tariffs for natural gas storage services for the third regulatory period (1 January 2011 - 31 December 2014). Some of the main changes, with effect on the value of the storage tariffs, are the following:

- the recovered productivity dimensioned in such a way as to pass on to consumers the greater efficiencies obtained by companies;
- the introduction of a specific tariff component for the coverage of the costs for the restoration of the storage sites;
- the revision of the depreciation rates during the regulatory period according to the new investments;
- the contribution of the higher income (consequent to any competitive allocation procedures) to cost coverage, when the companies opt to maintain the mechanisms for safeguarding and incentivising investments.

The Authority also substantially confirmed the mechanisms in force in the past four years and a remuneration rate of the invested capital was defined, i.e. a real rate of 6.7% before taxes. In particular, the following were confirmed: the application of a single national tariff; the mechanisms to assure revenues for costs of capital and the mechanism to incentivise new investments through the recognition of a higher remuneration rate of the capital invested in the construction of the new storage and in the enhancement of existing sites.

1.2.14 *Resolution no. 45/11*

With this measure, the AEEG intends to amend the current regulations for the natural gas balancing service, with particular reference to withdrawal and to the procedures for supplying the related resources.
The major transport company shall be responsible for balancing, with the following duties:

- Determining the overall imbalance of the system;
- Procure the storage resources to cover the overall imbalance of the system through a platform for collecting the offers of said resources, organised and managed by the GME on behalf of the company in charge of balancing;
- Paying the net balance of the items relating to the transactions completed, together with the items considered completed with the balancing user to cover its imbalance;
- Organising and managing the system of guarantees covering the exposure of the system to the user.

The other transport companies other than SRG, which are users of the storage service for the operational balancing of their transport network, update the reservation of the capacity at the storage sites in the day after the one to which it refers, within a term, defined in the network code of the company in charge of balancing, which allows the regular performance of the activities instrumental for the determination of the SCS and of the outcomes of the balancing session.
Moreover, the storage companies and the transport companies that manage the physical points of the network interconnected with storage sites shall revise the agreements that regulate the allocation in the respective systems with the procedures for allocating the quantities of gas set out in the offers accepted for balancing.

1.3 PERTINENT REGULATIONS AND LAWS

The following paragraphs, organised according to the promulgating body, specify the pertinent regulations and laws for the purposes of the storage activity and of the application of the Storage Code.

1.3.1 *European Community Regulations*

- Directive 2003/55/EC of 26 June 20013 “Common rules for the internal market in natural gas”;
- Regulation (EU) No. 994/2010 concerning measures to safeguard security of gas supply.

1.3.2 *Acts of the Italian Parliament*

- Law no. 481 of 14 November 1995, “Rules for competition and regulation of services of public utility”;
- Law no. 239/04 of 23 August 2004, “Reorganisation of the energy sector and delegation of powers to the Government for the reorganisation for the current provisions on energy”;
- Law no. 340 of 24 November 2000, “Provisions for deregulation and for the simplification of administrative procedures”.

1.3.3 *Government Decrees*

- Legislative Decree no. 164 implementing Directive no. 30/98/EC introducing common rules for the internal market in natural gas, in accordance with Article 41 of Law no. 144 of 17 May 1999 - published in the Official Gazette no. 142 of 20 June 2000;
- Decree by the Ministry of Productive Activities of 23 March 2005 “Simplification of administrative compliance requirements in the natural gas sector”;
- Decree by the Ministry of Productive Activities of 25 June 2004 “Emergency procedure to address shortfalls in the natural gas supply in case of unfavourable weather events”;
- Decree by the Ministry of Industry, Commerce and Crafts of 26 September 2001;
- Decree by the Ministry of Industry, Commerce and Crafts of 9 May 2001 “Criteria making the hydrocarbon, strategic and modulation storage services technically and economically feasible”.
- Legislative Decree no. 93 of 1 June 2011 “Implementation of Directives 2009/72/EC, 2009/73/CE and 2008/92/EC providing common rules for the internal market in electricity and natural gas and a Community procedure to

improve the transparency of gas and electricity prices charged to industrial end-users, and repealing Directives 2033/54/EC and 2003/55/EC.
- Law Decree no. 1 of 24 January 2012, converted into Law no. 27 of 24 March 2012 "Urgent provisions for competition, infrastructure development and competitiveness", established the integrated transport and regasification services, inclusive of the natural gas storage services, and the storage services intended for regasification companies, on the occurrence of unforeseeable events;
- Ministry of Economic Development Decree 29/3/2012 "Rules on the strategic storage of natural gas";
- Law Decree no. 83 of 22 June 2012, converted into Law no. 134 of 7 August 2012, "Urgent measures for the growth of the Country", amended Article 14 Paragraph 3 of Law Decree no. 1 of 24 January 2012 introducing competitive auction procedures among the criteria for the assignment of modulation storage capacity;
- Ministry of Economic Development Decree of 15 February 2013 on storage and regasification, which defines the Storage Service associated with regasification and the Storage Service for LNG supply;
- Ministry of Economic Development Decree of 15 February 2013 on modulation storage, which defines, for thermal year 2013/2014, the Modulation Storage space to be assigned according to the procedures prescribed by Law Decree no. 1 of 24 January 2012 and defines provisions for the withdrawal of gas from the storage system;
- Ministry of Economic Development Decree of 19 February 2014 which defines, for thermal year 2014/2015, the Modulation Storage space to be assigned according to the procedures prescribed by Law Decree no. 1 of 24 January 2012.
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1.3.4 *Authority Resolutions*

- Resolution no. 120/01 of 30 May 2001 "Criteria for determining the tariffs for the transportation and dispatching of natural gas and for the use of LNG terminals";
- Resolution no. 26/02 of 27 February 2002 "Criteria for determining the tariffs for the storage of natural gas";
- Resolution no. 137/02 of 17 July 2002 "Adoption of guarantees for free access to the natural gas transport service and of rules for the preparation of network codes";
- Resolution no. 119/05 of 24 June 2005 "Adoption of guarantees for free access to the natural gas storage service, obligation of the parties that perform storage activities and rules for the preparation of storage codes";

- Resolution no. 185/05 of 6 September 2005 “General provisions for the quality of natural gas in accordance with Article 2, Paragraph 12, Letters g) and h) of Law no. 481 of 14 November 1995”;
- Resolution no. 50/06 of 3 March 2006 “Criteria for determining the tariffs for the storage activity and amendments and additions”;
- Resolution no. 56/06 of 16 July 2006 “Approval of company prices and determination of single prices for the storage activity, for thermal year 2006-2007”.
- Resolution ARG/gas 165/09 “Urgent measures for revising the rules for balancing and regulating natural gas storage services in accordance with Law Decree no. 78 of 1 July 2009”.
- Resolution ARG/Gas 72/09, “Initiation of a process for the formation of measures pertaining to tariffs for the natural gas storage activities for the third regulatory period”.
- Resolution ARG/Gas 119/10 “Consolidated regulations for the quality and tariffs of the natural gas storage service for the 2011-2014 period (TUSG): approval of part II “Regulation of tariffs for the natural gas storage service for the 2011-2014 regulatory period (RTSG)”, provisions on transitional price for the gas transport measurement service for the year 2011”.
- Resolution no. 149/2012/R/Gas “Provisions for the implementation of the Minister of Economic Development Decree of 29 March 2012 concerning strategic storage, and amendments and additions to Annex A to Resolution ARG/gas 119/10 of 3 August 2010 by the Authority for Electricity and Gas”.
- Resolution 152/2012/R/Gas “Changes to the variable price and to technical storage consumption”.
- Resolution 297/2012/R/Gas “Provisions concerning access to the natural gas transport service in the entry and exit points of the transport network interconnected with the storage or with regasification terminals”;
- Resolution 85/2014/R/Gas “Provisions for the assignment of storage capacity for the storage thermal year 2014 – 2015”

CHAPTER 2

DESCRIPTION OF THE STORAGE FACILITIES AND OF THEIR OPERATION

2.1 FOREWORD

The Storage Company offers a Storage service which relies on the coordinated and optimised use of storage reservoirs currently undergoing flow regulation and enhancement of the Cushion gas and of the Working Gas.

The storage activity is currently carried out by means of two conventional depleted gas reservoirs (Collalto and Cellino), with simple expansion, under concession granted by the Ministry of Economic Development (MSE) of Italy.

The available performance results from the optimised aggregation of the performance of the individual storage sites under concession to the Storage Company, determined taking into consideration the properties of each of them and taking into account the existing constraints on the surface facilities and on the wells.

To comply with the obligation to manage its own capacities in a coordinated and integrated manner, as prescribed by Article 12 Paragraph 1 of Italian Law Decree no. 164 of 23 May 2000 and to assure transparency and non-discrimination to all Shippers, the Storage Company has defined a single virtual node for access to the Storage System (Edison Stoccaggio Hub) through which the processes for the reservation and assignment of the capacities reserved by the Shippers will be managed. The Storage Company offers its own services to Shippers through the Edison Stoccaggio Hub irrespective of which specific storage site is activated in the injection or withdrawal phase.

This chapter describes the Storage System, the procedures for its management and the procedures for determining the offered capacities.

2.2 GENERAL DESCRIPTION OF THE STORAGE SYSTEM

Based on the prescriptions of Italian Legislative Decree no. 164/00, the storage of natural gas in reservoirs or deep geological units is carried out on the basis of a concession granted by the MSE to applicants having the necessary technical, economic and organisational capabilities.

From a technical and system point of view, a storage site consists of:

- The storage reservoir;

- The wells;
- The flowlines;
- The treatment and compression station.

The facilities that constitute the Storage System were designed and built, in consideration of the period in which they were conceived and of their specific employment, in accordance with domestic and international industry regulations, of the consolidated experience acquired and with the final goal of assuring that their operation would be characterised by a high level of safety, reliability and operating efficiency.
A brief description of the aforementioned types of storage, of the reservoirs, of the wells and of the facilities is provided below.

2.2.1 The storage reservoir

Underground natural gas storage sites consist of geological structures having characteristics that enable to stockpile, preserve and, when required, withdraw natural gas.
Storage sites are considered conventional when they are obtained using depleted or semi-depleted gas production reservoirs, semi-conventional when they use depleted oil reservoirs or aquifers (i.e. geological structures containing water), special when they use abandoned coal mines and in cavities obtained in underground salt formations.

2.2.1.1. *The different types of reservoirs and their problems*

Depleted gas reservoirs: the most significant elements are the shape and size of the reservoir, the breadth and characteristics of the aquifer, the gas-water contact, the characteristics of the reservoir rocks and of the caprocks.
The most important physical parameters of the reservoir rock that must be carefully evaluated are:

a. Interconnected porosity: the greater the interconnected porosity of the reservoir rock, the greater will be the natural gas accumulation capacity;
b. Permeability: the greater the permeability of the reservoir rock, the more suitable for storage the rock will be;
c. Interstitial water saturation: it should be as low as possible, because it reduces useful volume.

Another element to be considered is the “production mechanism” that influences the movements of the aquifer in the reservoir rock as the reservoir is filled and emptied. With reference to the production mechanism, the following are distinguished:

i. Simple expansion reservoirs, in which the aquifer remains substantially at the same level during the withdrawal and injection phases, allowing higher performance and fewer problems during the production phase;
ii. Waterdrive reservoirs, in which the aquifer rises rapidly during the withdrawal phase and must then be displaced during the phase of injection into the reservoir. In these reservoirs, performance is limited by the possible influx of water (withdrawal phase) and by the pressure increase needed to displace water from the reservoir (injection phase).

With regard to storage in aquifers, first of all it is necessary to find the geological structure, with an anticline being best. This structure is identified with surface geological surveys, then located with geophysical systems.

The most important requirement for aquifer storage is the ability to prevent gas from passing through the caprocks, which must have adequate thickness and low permeability, e.g. in the case of clay formations; this need is due to the fact that hydrostatic pressure is always exceeded in order to inject gas.

For storage in salt formations, the cavities used are obtained by dissolving the salt mass with water pumped through one or more wells and then used to extract the salt.
Knowledge of the shape of the cavity and of the characteristics of the surrounding rocks is an important element to determine the minimum and maximum pressure at which this type of storage can be operated.
Generally these types of storage do not have high working gas values but they do allow for considerable peak flow rates.

Storage in partially or fully depleted oil reservoirs has similar characteristics to storage in converted gas reservoirs; therefore, some of the operating and development methods that apply to the latter are also valid.

In this case, the injection of gas into an oil reservoir can be a part of the project for the secondary recovery of the oil itself; in this case, the typical advantages of storage are accompanied by those of the additional recovery of oil.
It should also be pointed out that the treatment stations to provide the gas with the necessary quality specifications, before its injection in the transport network, are often different from those used in the previous types of storage, in that they must be able to retain the fraction of liquid hydrocarbons suspended in the gas.

2.2.1.2. *Technical mining management of conventional storage reservoirs*

The knowledge of the production parameters acquired during the primary production phase is fundamental for correct technical mining management of conventional storage reservoirs
The aforesaid parameters and those acquired during the storage cycles enable to monitor the dynamic behaviour of the storage sites, be they already regulated or undergoing the flow regulation phase.
Monitoring reservoirs' behaviour enables to implement appropriate models simulating the behaviour of the reservoir in order to optimise the use of the availability capacities, without damaging the levels used for storage.

The main phases that characterise every storage reservoir are:

- Injection phase: during this phase, the pressure in the reservoir grows as the volumes of the injected gases increase and it is affected by the petrophysical/geostructural characteristics of the reservoir, by the production mechanism and by the compression capacity of surface facilities. In particular, the capacity of the reservoir decreases as pressure progressively approaches its maximum value; this value corresponds to the original static pressure of the reservoir and to the different value, if any, authorised by the MSE for the individual storage reservoir;
- Withdrawal phase: during the withdrawal phase, the pressure in the reservoir decreases as the volumes of the withdrawn gases decreases and it is affected by the petrophysical/geostructural characteristics of the reservoir and by the production mechanism. In particular, the withdrawal capacity of the reservoir decreases as pressure is reduced, because it is a function of the difference between static and dynamic pressure applicable at the wellhead.

Therefore, trends in the injection and withdrawal performance of each individual reservoir are a function of the trend over time of the volumes of injected/withdrawn gases and hence of the level of pressure of the reservoir itself.

In case of reservoirs that are still undergoing enhancement, the injection and withdrawal capacity is mainly limited by surface facilities, by the type of the wells and by the pressure conditions on the RNG to which the system is connected, whereas the reservoir pressure does not constitute a real operating constraint because, in the injection phase, the original static pressure cannot yet be reached.

The parameters that characterise a storage reservoir are:

- Cushion gas;
- Working Gas;
- Peak availability.

Cushion gas is the quantity of gas present in the reservoir, necessary to use the storage, and it is the minimum quantity required, present or injected into the reservoir when starting storage, which must always be maintained in the reservoir. The function of cushion gas is to allow withdrawal of the working gas while maintaining in the reservoir a determined level of pressure needed to contrast the rise of the aquifer without comprising the mining properties of the storage reservoirs over time.

The Working Gas is the quantity of gas present in the reservoirs during the storage phase which can be made available and replenished to be used for Hydrocarbon, Modulation, operational and Strategic balancing Storage, including the part of gas (called “pseudo working gas”) that can be produced but in longer times than those required by the market, which is essential to assure the peak performance that can be required by the variability of demand in daily and hourly terms.

The peak availability is the quantity of gas that the reservoir is able to withdraw and inject in one hour (related to the daily value by multiplying the hourly flow rate times 24).

2.2.2 Wells

Wells connect the hydrocarbon levels of the reservoir with the surface structures and enable to move the gas and to carry out other specific ancillary activities, such as re-injection of formation water, when possible, and reservoir monitoring.
Each well is provided on the surface with equipment capable of providing for the separation of water in the free state and/or of condensation and with a control system connected to a unit able to assure comprehensive protection of the well and of the other equipment through a pneumo-hydraulic control system.

The part of the well directly in contact with the hydrocarbon levels, known as “completion”, is specifically structured to enable gas injection and withdrawal directly into/out of the rocky formation.

The average depth of the wells is naturally tied to the depth of the levels dedicated to storage and it currently is between 500 and 1,500 meters below sea level.

From the technical point of view, the structure of the wells can be represented as follows:

- externally, towards the geological formations it traverses, the well consists of concentric hole sections, lined with steel pipes (casing) with a cement filler in the annular space between the formation and the casing. The aforesaid filler secures the mechanical anchorage of the piping and the hydraulic isolation from the formations it traverses;
- within the casing, additional steel tubing is positioned, called “completion tubing”, whose purpose is to assure gas flow in conditions of complete safety.

To assure the best possible performance, gas movement wells are sometimes completed with the “sand control” technique, by positioning appropriate filters (“gravel pack”) at the bottom hole, to retain the finest solid components of the rocky formation.
The production casing and tubing are connected on the surface to a series of valves that constitute the “well head”, the only part of the well that is visible on the surface.

Each gas injection/withdrawal well is equipped with safety valves, able automatically to shut off the flow of gas from the reservoir following any anomalies of the surface facilities directly connected with the well itself.

Each well, from the operational viewpoint, is operated with a pre-determined *delta P* (maximum allowable pressure difference between static pressure and dynamic pressure to avoid problems to the formation and to the well while assuring continuity in the performance of the service) that takes into account the petrophysical characteristics of the involved level, the production mechanism, the type of completion and the location of the well in relation to the morphology of the level.

The wells in the Storage System are classified according to their use:

- Operational wells, used both for gas injection and withdrawal;
- Monitoring wells, used to control the pressures and the degree of gas/water saturation in the hydrocarbon levels of the reservoir;
- Possible wells for re-injecting the water originating from the formation during the gas withdrawal phase, following appropriate separation of the gas.

2.2.3 Flowlines

Wells, whether isolated or grouped in clusters, are distributed in such a way as to cover the area of the reservoir and for this reason they may be located even several kilometres away from compression and treatment plants. To enable to move gas between the wells and the compression and treatment plants, connecting pipelines are used, called “flowlines”.
These pipelines are fitted with their own shut-off valves and safety devices for management and control, both local and remote.
The size and characteristics of the flowlines are also important. They affect the performance of the System in that the Gas, during its travel, undergoes a head loss (pressure reduction), proportional to the flow rate of Gas transiting through the pipes.

2.2.4 Treatment and compression stations

The storage facility is equipped with all machines and systems required to carry out processing and control operations for the injection of the natural gas from the transport system into the underground reservoirs and to withdraw volumes of gas from the reservoir to the transport network.
In the storage facilities, gas undergoes the following main processes:

- Treatment, to provide the gas with the required quality specifications before injecting it into the National Pipeline Network (or RNG);
- Compression in the reservoir and/or in the RNG.

2.2.4.1. *Treatment stations*

The gas injected into the reservoirs becomes enriched with water and at times also with higher hydrocarbons (which on the surface condense into gasoline) present in the interstices of the geological formations used for storage. The presence of water in the extracted gas is particularly accentuated in aquifers or in reservoirs with waterdrive production mechanism.
For this reason the gas, before being redelivered on the RNG, must pass through the well head separators, the station separators and then through the treatment plants.

2.2.4.1.1. A brief overview of treatment plants

Treatment plants can be divided into first phase plants and final treatment plants.

First phase plants comprise:

- Separators;

- Heaters;
- Pumps for injecting hydrate inhibitors (glycol and/or methanol).

The task of the separators, normally installed at the wellhead and at the inlet/outlet of the treatment station, is to retain free water (or other liquids, e.g. glycol and/or gasoline) and the water that condenses by effect of cooling and of the decrease in gas speed due to the change in separator diameter.
The function of heaters and of glycol/methanol injection pumps is to prevent the formation of hydrates in the equipment and in the pipelines that run from the wellhead to the treatment plan.

Final treatment plants are:

- Plants for dehydration by absorption (glycol plants);
- Plants for dehydration by cooling (LTS);
- Solid bed treatment plants.

The treatment plants currently installed in the stations of the Storage Company are glycol plants. Triethylene glycol is used in these gas dehydration plants. The water associated with the gas is absorbed simply through physical contact between the humid gas and glycol; the water-saturated glycol is then recovered and sent to a regeneration loop for subsequent re-use in the dehydration process.

2.2.4.2. *Compression stations*

During the withdrawal phase, both conventional and semi-conventional storage reservoirs need compression only towards the final phase of the cycle when reservoir pressure is maintained, on average, above the pressure of the RNG to which they are interconnected (free flow). The quantity of working gas that can be extracted with no need for compression depends on the production mechanism and on the value of pressure reached at the end of the filling operation.

2.2.4.2.1. Description of the compression station

The compression station is interposed between the RNG and the flowline connecting the station with the storage wells. The connection between the station and the RNG and the flowline is achieved with pipelines suitably dimensioned to contain head losses and limit the noise generated by the flowing gas. The pipelines are called “intake and delivery manifold”, depending on the direction of the gas and on the input and output of the compressor.

The compression station is generally replaced by several modular units, mutually connected by means of appropriate valves provided on each

manifold. The valves enable to configure several types of operation, several conditions of travel and maintenance operations on the units, without compromising the overall operation of the station.
The compression station consists of the compression unit (there may be more than one), equipped with power supply, refrigeration, flow rate control/regulation systems.

2.2.4.2.2. Dimensioning of the compression stations

The main function of the compression station in Storage facilities is to make it possible to inject volumes of gas into the reservoir, drawn from RNG at a lower pressure level than the reservoir's.
Compression can also be useful during the withdrawal phase, generally towards the end, when reservoir pressures tend to approach the values of the transport network. However, use of compression during this phase remains marginal.
Therefore, as a rule compressor dimensioning is more strictly constrained by the injection cycle.
Therefore, the bases for the dimensioning are the daily flow rates and the intake pressure (pressure at which the Gas arrives from the RNG) and delivery pressure at which the compressor has to operate, taking into account the maximum limits of instantaneous delivery pressure to be applied in order to avoid damages to the reservoir and to the caprocks.

2.2.4.2.3. Types of compressors

Compressors are divided in two classes:

- Reciprocating compressors
- Centrifugal compressors

A reciprocating compressor is a positive-displacement compressor because it reduces the volume available to the fluid to increase its pressure.
There are several types of reciprocating compressors: horizontal, vertical, "V-type" "L-type". Moreover, in reciprocating compressors, cylinders can be double-acting and single-acting.
Centrifugal compressors, instead, transform the kinetic energy of the fluid into pressure energy.

Compressors are coupled to motors that enable their mechanical components to move. The motors can be electrically powered (with fixed rpm or with speed variator) or gas-fuelled.

The compressors used by the Storage Company are reciprocating and powered by electric motors.

2.2.4.2.4. Criteria for configuring the compression stations

For the configuration of a compression station, many parameters are taken into consideration; among them, the level of flexibility the system must allow, the thermal and energy efficiency of the machine and the level of the investment play a fundamental role.
For the typical flow rates of the sites of the Storage Company, reciprocating compressors generally allow to better meet flexibility requirements, whilst maintaining higher efficiencies than centrifugal compressors.

2.2.4.2.5. Compression monitoring and control systems

The operation of storage sites requires a certain flexibility in terms of daily peak performance, both out of purely commercial considerations, and because of constraints deriving from the characteristics of the reservoir.

The range of withdrawal and injection flow rates depends on the filling of the reservoir and on the instantaneous operating pressures and it may be very wide; therefore, the need to be able to adjust the parameters of pressure and flow rate at the output of the compressor is an essential factor. When possible, it is preferable to make the adjustments by changing the rotation rate of the shaft coupled to the compressor. This takes place, for example, when the compressor is coupled to gas combustion engines (the combustion charge is changed) or to variable-speed electric motors.

If the motor rotates at a fixed speed, the adjustment is made by recycling. There are also other possible adjustment methods, but they are tied to the type of compressor and to its construction elements; in reciprocating compressors, it can be carried out by changing the cylinder clearance of the compression chambers, excluding effects, and through the engage-disengage system (not advisable because of the impact it may have on the machines and instrumentation).

2.3 DISPATCHING AND OPERATION

Dispatching is a fundamental element of the System because it represents the operational, control and supervision centre for:

- Protecting the plant safety of the process;
- The performance provided by the Storage System;
- The performance of specific activities tied to the service.

Dispatching uses dedicated software that allows to minimise the controls and manipulations the operator has to carry out on individual parts of the storage facility.

In particular, the computerised management systems are used for the following activities:

1. Control of production and of the treatment and compression processes;
2. Production optimisation;
3. Management of commercial issues.

2.3.1 Control of production and of the treatment and compression processes

This activity enables to:

a. Monitor the operation of the facilities and of the field instrumentation at all times, constantly assuring the safety of the equipment, of personnel and of the environment;
b. Remotely operate the stations in conditions of total or partial absence of personnel, significantly reducing operating costs and making production control more effective and dynamic;
c. Centralise production management and planning, improving reaction times to multiple market demands.

2.3.2 Production optimisation

This activity enables to:

a. Optimally use the different properties of each site, also in light of the surface constraints, in such a way as to determine significant increases in performance for the same volume moved by the storage system;
b. Optimally use each level of the site according to its petrophysical characteristics and to the production mechanism;
c. Determine the daily flow rate of each well at every instant, taking into account its location, type of completion, the extent to which the emptying/filling operation has been completed.

The optimisation of the injection and withdrawal capacity is accomplished starting from the total demand on the different storage reservoirs (basic or peak storage) that comprise the System, taking into consideration the constraints on the treatment/compression stations and on the RNG.

As mentioned above, storage sites are divided into two major categories:

- Basic storage;
- Peak storage.

A brief description of the two types of storage is provided below.

2.3.2.1. *Basic storage*

It is used throughout the winter season and it generally has high working gas and a slow decline in daily peak capacity during the withdrawal phase.
This category includes most storage in depleted gas reservoirs and a certain part of storage in aquifers.

2.3.2.2. *Peak storage*

Used only for brief periods during the winter season to meet daily demand peaks; the number of utilisation days can range from a minimum of 15-20 days to a maximum of 40-50 days, according to their size.
Working gas is generally below 0.5 Gmc and the decline in daily peak during withdrawal is rather marked.
This category includes most storage in salt caverns and a certain part of storage in depleted gas reservoirs and in aquifers.

The reservoirs through which the Storage Company carries out the storage activity, in view of their properties and level of development, belong to the basic storage category.

The overall demand in the different storage reservoirs comprising the System is allocated optimising the properties of each of them and taking into account any constraints on the treatment/compression facilities and on the RNG.
This method of utilisation and management of the Storage Systems enables to identify the optimal injection/withdrawal profile of each reservoir, with the goal of securing the best possible performance from the System.
In other words, the methodology enables both to maximise the System's peak availability at equal extracted volumes, and to assure filling within the times prescribed for the injection phase and with the proper flexibility levels.
The input data for the optimisation consist of the withdrawal/injection curves of all the sites that comprise the Storage System in question and of the load curve the System has to satisfy.

2.3.3 Management of commercial issues

This activity enables to:

- Manage the reservation, assignment and reassignment processes;

- Manage the processes for allocating the gas moved from storage;
- Manage invoicing processes

The Storage Company has developed an Electronic System (hereafter also "Escomas") to make available the functionalities reported below in an impartial, non discriminatory system and to optimise, in terms of effectiveness and efficiency, the management of the following processes:

- Assignments of Storage capacity at the start of and during the Thermal Year;
- Availability of performance and planning;
- Allocations;
- Storage position in terms of inventory;
- Capacity and Gas transactions;
- Balancing and storage replenishment;
- Invoicing;
- Communications between Storage Company and Shipper, when provided;
- Other functionalities and information.

This system, and its functionalities, will be better described in the following paragraphs and chapters as well as in the Escomas user manual.

2.4 DETERMINATION OF AVAILABLE CAPACITIES

The determination of the minimum guaranteeable performance and then, daily, the allocation of the overall demand in the different storage reservoirs comprising the System is done optimising the properties of each of them (basic or point storage) taking into account any constraints on the treatment/compression plants and on the transport system and the schedule of the work for flow regulation, enhancement and development of the System.

This method of utilisation and management of the storage systems enables to identify the optimal injection/withdrawal profile of each reservoir, with the goal of securing the best possible performance from the System.

In other words, the methodology enables both to maximise the System's peak availability at equal extracted volumes, and to assure filling within the times prescribed for the injection phase.

The input data for the optimisation consist of the withdrawal/injection curves of all the sites that comprise the Storage System in question and of the load

curve the System has to satisfy; for the sake of completeness, it should be recalled that the load curve is nothing other than the quantity of gas which the set of the reservoirs to be optimised must satisfy and that the withdrawal/injection curves are rendered through the three functions:

- Qg = daily flow rate as a function of emptying/filling
- S = emptying/filling as a function of time
- P = pressure as a function of emptying/filling

The movement and transfer of the gas volumes between the transport systems and the underground storage reservoirs take place through the natural gas storage station. During the phases of development or enhancement of a storage site, the facilities of the storage station (flowlines, treatment and compression system) can constitute a constraint in determining the maximum performance deliverable by the Site.

During operations, the configuration and type of surface facilities can represent limits to the flexibility of the Storage System (flow reversal, minimum flow rates deliverable).

All equipment contained in the stations is dimensioned to carry out a complete storage cycle taking into consideration the maximum performance obtainable from the reservoir. The cycle comprises an operating injection (or storage) phase and an operating withdrawal (or production) stage in which the volumes stored in the previous phase are returned to the system from which they were withdrawn.

Therefore, the determination of the Storage capacity is based on:

- Mining aspects;
- Technical-managerial aspects;

The following paragraphs describe the procedures whereby the Storage capacities are defined.
The aforesaid capacities can be subject to changes over time insofar as they depend on the actual filling and emptying at the end of the injection and withdrawal campaign, on the technical-managerial conditions of the transport system connected to the plant and on the work schedules for maintenance operations on the System.

2.4.1 Mining aspects

The Storage capacity depends in the first place on the geometry of the reservoir and on its geophysical characteristics, which are identified through the following activities:

a. Geological survey of the identified structure and of the caprocks;
b. Study of behaviour during the production phase, in the case of depleted or semi-depleted gas reservoirs (conventional storage);
c. Dynamic simulation of the behaviour of the structure in the injection and withdrawal phase through the use of mathematical models developed for this purpose;
d. Determination of the performance with filling both at the original pressure and at a pressure higher than the original, assuming different values of dynamic pressure at the wellhead;
e. Determination of the performance according to the number and type of wells (vertical, horizontal wells), and to the type of completion (completion with gravel pack, with large-diameter tubing, etc.).

In the case of depleted or semi-depleted gas reservoirs, the studies per points a) and b) have already been carried out and revised in the course of the productive life of the reservoir; in particular, the analysis of the dynamic behaviour carried out during the primary production phase enables to identify the characteristic parameters of the reservoir-aquifer system (simple expansion, moderate waterdrive, strong waterdrive production mechanism) that provide the basis for the dimensioning of the future storage in terms of capacity and productivity.

The simulations we have briefly mentioned above enable to determine the technical performance obtainable and the other storage parameters (Working Gas, withdrawal/injection peak, Cushion gas), with changes in reservoir pressure and dynamic pressure at the wellhead.

2.4.2 Technical-managerial aspects

In addition to the mining aspects, the Storage capacity also depends on some technical-managerial parameters:

a) *Schedule of Significant Maintenance Operations*: the performance made available by the Storage Company are strongly influenced by the schedule of works for Significant Maintenance Operations, as defined in Paragraph 13.2 of the chapter “Scheduling and Managing Maintenance Operations” and notified to the MSE in accordance with the Bill. A change in the times

and types of maintenance operations can modify the system's availability for more than 40% of the available performance.

b) *Delivery/Redelivery Pressures*: the purpose of the compression station is to raise the pressure of the gas originating from the RNG to such value as to enable them to be injected into the reservoir during the filling (injection) phase or, vice versa, to be moved to the RNG during the reservoir emptying phase (withdrawal). The operating pressure of the storage reservoirs vary considerably according to the level of filling and on average they are higher than the operating value of the primary gas pipeline network; therefore, the minimum guaranteed pressure level, especially in the injection phase, is an extremely significant management constraint for the purpose of allowing to secure the Performance.

c) *The characteristic trend in Shipper's modulation requirements*;

d) *Reversibility of the flow*: to perform the Physical reverse flow service, illustrated in sub-paragraph 3.2.3.1, the Storage Company must perform the following activities:

- Modify the set-up of the station (compressor start/stop, valve opening/closing, dehydration system activation/deactivation, etc.);
- Modify the set-up of the well areas (valve opening/closing, insertion/exclusion of separators, heaters, regulating valves, etc.);
- Reversing the technical and fiscal measures present both in the station and at the well areas;
- Requesting the connected Transport Company to reverse the corresponding measurement station;
- Informing, via fax, the Ministry of Economic Development, UNMIG Division, of all the operations discussed above, indicating the measuring line in operation.

Therefore, as indicated in Chapter 6 "Injection and withdrawal reservations and commitments", the Shipper can request the physical reverse flow service provided it is reserved at least 2 days before the date when the service is requested.

e) *The schedule of periodic inspections and of the other scheduled maintenance operations*: obviously, any type of maintenance operation that needs to interrupt the activities on a part of the System will have impacts on the available performance.

2.4.3 Determination of System Performance

Considering what has already been discussed in this chapter, the Storage Company simulates the dynamic behaviour of its own storage reservoirs and

of the performance associated with it through the use of dedicated calculation and software instruments.
The purpose of the simulations carried out is to optimise the performance offered in the Injection and Withdrawal Phases in compliance with the regulations promulgated by the MSE and with the provisions of the Authority, taking into account the petrophysical parameters and the productive history of each storage reservoir.

2.4.3.1. *Simulation instruments*

The Storage Company, within the scope of its activity for the development of its reservoirs that have not yet been flow-regulated, is developing the models for simulating the dynamic behaviour of the storage reservoirs and the physical quantities associated with them (injected/withdrawn volumes, static and dynamic pressure, storage capacity in terms of Space, the availability of Injection and Withdrawal over time, etc.). It currently simulates the behaviour of its storage sites both using an “Eclipse” 3D mathematical simulator (normally used in the oil industry) and through models developed *ad hoc*. These models, based on the geodynamic and structural information acquired over time and on the productive history of the reservoirs both in the primary production and in the storage phase, are constantly updated and recalibrated.

In particular, all static and dynamic models reflect the characteristic geodynamic, physical and petrophysical parameters of each reservoir. It should be stressed that the dynamic behaviour of a reservoir in reality is neither linear nor stationary, and therefore the reservoir, to be kept safe from possible damages, needs an accurate definition of its model.
In the case of storage sites not yet at steady state and hence subject to constant plant changes and for which new wells are being built, it is readily apparent that the simulation models are mainly based on information collected during the production phase and hence they still lack information about the behaviour of the new wells and of the reservoir under the new conditions.

2.4.3.2. *Technical and managerial constraints and input data for the simulations*

The Space values and the Injection and Withdrawal peak availability, relating to the individual reservoirs, are determined starting from the aforesaid simulation in compliance with the constraints of the reservoir, of the wells, of the technical equipment on the surface.
The simulations needed to determine the performance are carried out considering distinct input data for the injection and withdrawal phase, subject to the constraints of each storage reservoir, which depend on the productive history, e.g. the state of the wells, their location with respect to the hydrocarbon area, their type of completion and the shutdowns or partial

reductions involving the injection and/or withdrawal phase due to the enhancement or development works.

The inputs considered for the simulations relating to the Injection Phase are:

- The maximum reservoir static pressure not to be exceeded, equal to the original static pressure or to the different value authorised by the MSE for the individual storage reservoir in the case reservoirs at steady state;
  For reservoirs undergoing enhancement and not yet at steady state, the pressure considered in the simulation is the one expected to be reached with the volume expected to be injectable, taking into account the enhancement works and/or the existing constraints on the current surface facilities.
  The injectable volume and the associated pressure, therefore, are determined iteratively, imposing the constraint that, during the withdrawal phase, it must be possible to withdraw the gas injected by the Shippers during the previous injection phase.

- The maximum capacity of each well during the injection phase;
- The maximum capacity of each reservoir during the injection phase, which depends on the characteristics of the reservoir and on the operating limits of the compression plants;
- The shut-downs that become necessary to measure the static pressure at the end of the injection phase, as prescribed by Article 18 of Italian Ministerial Decree 26/8/05, and any shut-downs that may be expected during the cycle. The latter shut-downs are particularly important especially when enhancing and developing a reservoir, when it becomes necessary to monitor the replenishment.;
- The work schedule authorised by the MSE for the execution of Significant Maintenance Operations;
- The operating times of the Injection Phase, which must be approximately 6/7 months.

The inputs considered for the simulations pertaining to the Withdrawal Phase are:

- The maximum withdrawal capacity of each well;
- The maximum capacity of each reservoir during the withdrawal phase, which depends on the characteristics of the reservoir and on the maximum operating limits of the surface facilities;
- The minimum withdrawal performance, generally coinciding with the minimum level of the treatment and compression plants;

- The minimum value of the dynamic pressure at the wellhead;
- The maximum quantity of water producible on a daily and annual basis, in compliance with the volumes to be re-injected into levels located in the subsoil;
- The shut-downs that become necessary to measure the static pressure at the end of the withdrawal phase, as prescribed by Article 18 of Italian Ministerial Decree 26/8/05, and any shut-downs that may be expected during the cycle. The latter shut-downs are particularly important especially when enhancing and developing a reservoir, when it becomes necessary to monitor the withdrawal;
- The work schedule authorised by the MSE for the execution of Significant Maintenance Operations;
- The operating times, of approximately 5/6 months.

The injection and withdrawal curves of the models of each site constitute the basis on which the determination of the capacities made available during the assignment phase is grounded.

2.4.3.3. *Results of the simulations*

The results of the simulations discussed in the previous paragraph consist of the injection and withdrawal curves of the Storage System that associate the volumes moved with peak availabilities.

- *Relationships between Space and Injection (injection curves): optimal Injection profile and peak Injection availability*

The optimal Injection profile is initially defined in January - taking into account the best forecasts about the evolution of the overall withdrawal until the end of the Thermal Year and of the technical and managerial constraints discussed in paragraph 2.4.2. - on the basis of the following operating concepts:

- Injection of high volumes in the initial phase, compatibly with existing facilities.
- Optimisation of the injection flow rates after the initial phase, according to the actual capacities of the reservoirs and of the facilities in order to maximise injection availability.

Based on these considerations, the optimal filling conditions are defined along with the consequent peak Injection availability, a reverse function of the cumulative injected volume.

The decreasing trend of the same availability over time has the purpose of addressing the injection of the monthly volumes according to the real capacities of the reservoirs without causing overpressure phenomena, which consequently would entail a subsequent reduction of the volumes to be injected.
To give proper consideration to the operational flexibilities required by System Users and the fact that the optimal profile may not be followed precisely, alternative minimum and maximum progressive profiles are also tested, that still assure the correct overall filling of the reservoir.

- *Relationships between Space and Withdrawal (withdrawal curves): optimal Withdrawal profile and peak Withdrawal availability*

The Withdrawal Profile for the next Thermal Year is initially defined in the month of January, taking into account the complete filling of the assigned Space, of the works for enhancement, flow regulation and development, of the technical and managerial constraints per point a) above, with the goal of maximising the space and the withdrawal flow rate made available to Shippers.

The Withdrawal Profile is determined according to the following criteria:

- Maintenance of the maximum available withdrawal capacity over time;
- Withdrawal of high volumes in the period of greatest climatic demand (between January and February);
- Optimisation of the withdrawal flow rates after the initial phase, according to the actual capacities of the reservoirs in order to maximise the withdrawal availability of the Storage System;
- Maximisation of the working gas made available to Shippers.

The Storage Company determines the utilisation profiles and the withdrawal adjustment factors consistent with the trend of the optimised performance curve of the System and it can offer additional Withdrawal performance to Shippers, on a continuous or interruptible basis taking into account the need to preserve the continuity of the optimised withdrawal performance until the end of the Withdrawal Phase.

- *Determination of the Space, of the Injection Flow Rate (PI) and of the Withdrawal Flow Rate (PE)*

Starting from the results of the simulation, the Storage Company determines the capacities available for mandatory services, in accordance with Chapter 3 “Description of the services”, below, in terms of Space, Injection Performance and Withdrawal Performance.

Space or S

The total space made available for assignment is defined on the basis of the System's injection and withdrawal curves, and of the forecast assignment for the different types of services (Strategic, operational balancing, Hydrocarbon and modulation).
Since to each service is associated a different Withdrawal and Injection Performance, a change from the assignment assumptions formulated in terms of allocation of the available capacities in the different types of service will change the total volume made available.
By way of example, an incremental space assigned for the hydrocarbon storage service does not simply reduce the space assignable for the modulation service, but it reduces the total assignable space.
Therefore, it is readily apparent that if the requests for the storage services with higher assignment priority were different from those assumed, the Storage Company would have to recalculate and re-publish the S, PI and PE capacity data available before the end of the assignment cycle.
For the purposes of the offer of the mandatory services, the Storage Company makes available to Shippers a Space capacity, divided according to the following categories of services:

a. Space for the strategic storage service (S_{STR});
b. Space for the operational balancing of the system (S_{BIL});
c. Space for the hydrocarbon storage service (S_{M});
d. Space for the modulation storage service (S_{MOD}).

If additional Space capacity is available in the Thermal Year, said capacity will be assigned, on a monthly and weekly basis, for the Shipper Balancing Service (S_{BU}), according to the procedures described in paragraph 5.9.1 below.

Injection flow rate or PI

The total PI made available for assignment is defined according to the technical capacity of the system and, during the Injection Phase, it has a decreasing trend as a function of the progressive filling, whereas in the withdrawal phase it is made available according to the characteristics of the storage system and according to the procedures described in sub-paragraph 3.2.3.1 of the chapter "Description of the Services".
For the purposes of the offer of the mandatory services, the Storage Company makes available for assignment a CI capacity that is equal to the value of the PI available at the start of the injection phase and divided according to the following categories of services:

a. Injection flow rate for the operational balancing of the system (CI_{BIL});
b. Injection flow rate for the hydrocarbon storage service (CI_{M});
c. Injection flow rate for the modulation storage service and for the purposes of replenishing strategic storage (CI_{MOD}).

If additional Injection capacity is available in the Thermal Year, said capacity will be assigned, on a monthly and weekly basis, for the Shipper Balancing Service (CI_{BU}), according to the procedures described in paragraph 5.9.1 below.

Withdrawal flow rate or PE

The total Withdrawal Flow rate made available for assignment is determined according to the technical characteristics of the system and it has a decreasing trend as a function of the overall emptying of the system.
For the purposes of the offer of the mandatory services, the Storage Company makes available for assignment a CE capacity that is equal to the value of the PE still available at the end of the emptying of the modulation and hydrocarbon Working Gas and divided according to the following categories of services:

a. Withdrawal flow rate for the operating balancing storage service (CE_{BIL});
b. Withdrawal flow rate for the hydrocarbon storage service (CE_{M});
c. Withdrawal flow rate for the modulation storage service (CE_{MOD}).

If additional Withdrawal capacity is available in the Thermal Year, said capacity will be assigned, on a monthly and weekly basis, for the Shipper Balancing Service (CE_{BU}), according to the procedures described in paragraph 5.9.1. below.

2.4.4 From System performance to available Capacities

2.4.4.1. *Capacity for the Strategic Storage Service*

The Storage Company determines the Space available for the Strategic Storage Service (hereafter S_{STR}) to the extent that it pertains to it, deriving from the allocation made among the storage companies, relative to the total quantity established by the MSE.

2.4.4.2. *Capacity for the Balancing Service*

The Storage Company determines the Capacities for the Balancing Service in the following way:

- Space (hereafter S_{BIL}) is equal to the total quantity required by the transport Company;
- The Injection Flow Rate (hereafter CI_{BIL}) is equal to the total quantity required for balancing needs by the transport Company;
- The Withdrawal Flow Rate (hereafter CE_{BIL}) is equal to the total quantity required for balancing needs by the transport Company.

2.4.4.3. *Capacities available for the Hydrocarbon Storage Service*

The Storage Company determines the Capacities for the Hydrocarbon Storage Service in the following way:

- The Space (S_M) is the quantity assigned by the Storage Company in the previous Thermal Year or the quantity authorised by the MSE, whichever is lower;
- The Injection Flow Rate (CI_M) is equal to S_M divided by 170 (one hundred seventy) days, consistently with the purpose of securing for domestic production a supply flexibility comparable with the characteristic flexibility of import contracts; 170 is the number of days obtained applying to the Injection Period the same flexibility expected for the Withdrawal Period;
- The Withdrawal Flow Rate (hereafter, CE_M) is the quantity assigned by the Storage Company in the previous Thermal Year or the quantity authorised by the MSE, whichever is lower;

Where

$$CE_M = CE_{Mbase} + CE_{Mbackup}$$

and

$$CE_{Mbase} = S_M/120$$

2.4.4.4. *Capacity for the Modulation Service*

The Storage Company determines the Capacities for the Modulation Service in the following way:

- Space (hereafter S_{MOD}) is equal to:

$$S_{MOD} = S - S_{STR} - S_M - S_{BIL}$$

where S is equal to the total Space made available and possibly revised for assignment in accordance with paragraph 2.4.2.3 above;

The Modulation Service S_{MOD} comprises the Peak Modulation service and the Flat Modulation service, mutually differentiated by the Withdrawal Capacity associated with them.

$S_{MOD=} S_{MODP} + S_{MODU}$

Where:

S_{MODP} is the Space offered for the Seasonal Peak Modulation Service;

S_{MODU} is the Space offered for the Flat Modulation Service.

The allocation of S_{MOD} is determined by the Ministry of Economic Development.
In accordance with Article 2, Paragraph 5 of Minister of Economic Development Decree of 19 February 2014, Edison Stoccaggio does not assign Capacity for the Flat Modulation Service for thermal year 2014-2015.

The Space S_{MODP} in turn is subdivided into

$S_{MODP} = S_{MODPS} + S_{MODPM}$

and similarly

The Space S_{MODU} in turn is subdivided into

$S_{MODU} = S_{MODUS} + S_{MODUM}$

Where:

S_{MODPS} = Space for the Seasonal Peak Modulation Service

S_{MODPM} = Space for the Monthly Peak Modulation Service

S_{MODUS} = Space for the Seasonal Flat Modulation Service

S_{MODUM} = Space for the Monthly Flat Modulation Service

Seasonal services provide for the availability of Injection Capacity in the period between the month after the one when Capacities are assigned and the month of October.

Monthly services provide for the availability of Injection Capacity solely in the month following the one when Capacities are assigned.

Capacities for the Peak Modulation Service are made available, no later than the month of March for the assignments at the start of the thermal year and they are offered first for the Seasonal Peak Modulation Service.

If there are unassigned quantities at the end of the aforesaid assignment process, Edison Stoccaggio shall define the assignable quantities for the Peak

Modulation service with injection in the month of April and, if there are additional available capacities, Edison Stoccaggio will make these quantities available through assignments in the course of the Thermal Year according to distinct competitive procedures for the Seasonal and the Monthly Peak Modulation Service.

The quantities of Space for monthly products are determined iteratively after the assignment of the seasonal products and according to the unassigned injection capacity available for the month of the assignment. By way of example, if there is residual capacity after the procedure for the assignment of the seasonal product of the Seasonal Peak Modulation Service starting from 1 April, the Space offered for the monthly product of the month of April shall be determined as the lower value between the available unassigned Space for the Seasonal Point Modulation Service and the maximum quantity injectable in the month of April alone.

Consequently, if there is residual capacity after the assignment procedures of the month m-1 of the seasonal product and of the monthly product in the month m, Edison Stoccaggio, iterating the process described above, shall make available in the month m:

- for the seasonal product, the Space corresponding to the total injectable quantity from the month m+1 until the end of the Injection Phase;
- for the monthly product, the Space corresponding to the maximum injectable quantity in the month m+1 alone.

- The Injection Flow Rate (hereafter CI_{MOD}) is equal to:

$$CI_{MOD} = CI - CI_{M} - CI_{BIL}$$

where CI is equal to the total Injection Flow Rate made available and possibly revised for assignment in accordance with paragraph 2.4.2.3 above;

The Injection Capacity for the Modulation service CI_{MOD} is subdivided into a portion intended for the peak modulation service and a portion intended for the flat modulation space.

$CI_{MOD=} CI_{MODP} + CI_{MODU}$

Where:

CI_{MODP} is the Injection Capacity offered for the Seasonal Peak Modulation Service;

CI_{MODU} is the Injection Capacity offered for the Flat Modulation Service;

The allocation of CI_{MOD} is determined by the Storage Company according to the following proportionality criterion:

$CI_{MODP} = CI_{MOD} \times S_{MODP}/S_{MOD}$

$CI_{MODU} = CI_{MOD} \times S_{MODU}/S_{MOD}$

In turn, the Injection Capacity for the Peak Modulation Service CI_{MODP} is divided into

$CI_{MODP} = CI_{MODPS} + CI_{MODPM}$

and similarly

in turn, the Injection Capacity for the Flat Modulation Service CI_{MODU} is divided into

$CI_{MODU} = CI_{MODUS} + CI_{MODUM}$

Where:

CI_{MODPS} = Injection Capacity for the Seasonal Peak Modulation Service

CI_{MODPM} = Injection Capacity for the Monthly Peak Modulation Service

CI_{MODUS} = Injection Capacity for the Seasonal Flat Modulation Service

CI_{MODUM} = Injection Capacity for the Monthly Flat Modulation Service

The injection flow rate associated with the individual product of the Modulation Service shall be equal to:

$CI_{MODi,k} = CI_{MODi} \times S_{MODi,k}/S_{MODi}$

Where: i is the type of service, peak or flat, and k is the time reference of the assignment, i.e. seasonal or monthly product.

- The Withdrawal Flow Rate (hereafter CE_{MOD}) is equal to:

$$CE_{MOD} = CE - CE_{M} - CE_{BIL}$$

where CE is equal to the total Withdrawal Flow Rate made available and possibly revised for assignment in accordance with paragraph 2.4.2.3. above;

It is stressed that the CE_{MOD} for the modulation storage service can comprise a continuous component and a possible interruptible component.

The Withdrawal Capacity for the Modulation service CE_{MOD} is subdivided into a portion intended for the peak modulation service and a portion intended for the flat modulation space.

$CE_{MOD=} CE_{MODP} + CE_{MODU}$

The Flat Modulation service has associated with the assigned space S_{MODU} a constant withdrawal capacity, equal to:

$CE_{MODU} = S_{MODU} / 150$

The Peak Modulation Service has associated a withdrawal capacity, variable as a function of time and of the monthly withdrawable monthly volumes, capable of assuring the maximum performance availability in the months of January and February as established in Article 3 of the Minister of Economic Development Decree of 19 February 2014.
For the Peak Modulation Service, the Withdrawal Capacity utilisation profiles are annexed to Ministerial Decree of 19 February 2014.

2.4.4.5. *Capacity for the Balancing Service to the users of the transport service (hereafter Shipper Balancing Service) on a monthly basis*

The Storage Company determines the Capacities for the Shipper Balancing Service for the first and the second assignment session per paragraph 5.9.1. below, in the following way:

a) the Space (SBU) made available on a monthly basis is established on the basis of the Space capacities made available during the Thermal Year, and on the basis of the progressively available quantity, taking into account the quantity of Gas withdrawn or injected and the Shippers' monthly schedule;

b) the Injection Capacity (CI_{BU}) made available is equal to:

- In the Withdrawal Period

  - To the Injection Capacity on a continuous basis, additional to the Injection Capacity in the withdrawal phase available according to paragraph 2.4.4.6.;
  - To the Injection capacity on a monthly interruptible basis determined in an amount equal to any excess demand for Injection Capacity on a continuous basis recorded in the first session per paragraph 5.9.1. below.

- In the Injection Period

  - To the Injection Capacity on a continuous basis, additional to the Injection Capacity (CI_{MOD}) available according to paragraph 2.4.4.4.;
  - To the Injection capacity on a monthly interruptible basis per paragraph 2.4.4.8. below;

c) the Withdrawal Capacity (CE_{BU}) made available is equal to:

- In the Withdrawal Period
  - On a continuous basis, to the Withdrawal Extra Peak Capacity per paragraph 2.4.4.7. below;
  - To the Withdrawal capacity on a monthly interruptible basis per paragraph 2.4.4.8. below;

- In the Injection Period
  - On a continuous basis, to the Withdrawal Capacity per paragraph 2.4.4.6.;
  - To the Withdrawal Capacity on a monthly interruptible basis determined in an amount equal to any excess demand for Withdrawal Capacity on a continuous basis recorded in the first session per paragraph 5.9.1. below.

2.4.4.6. *Capacity for the Shipper Balancing Service on a weekly basis*

The Storage Company determines the Capacities for the Shipper Balancing Service on a weekly basis for the first and the second assignment session, per paragraph 5.9.1. below, based on the quantities made available for the Shipper Balancing Service on a monthly basis and not assigned within the related assignment procedures, with the exception of the reverse flow capacities on an interruptible basis, solely determined in an amount equal to any excess demand for Withdrawal and Injection Capacity on a continuous basis recorded in the first assignment session of the Shipper Balancing Service on a weekly basis.
In addition to the capacities not assigned within the scope of the assignment for the Shipper Balancing Service on a monthly basis, additional capacities can be made available on a weekly basis, determined according to the criteria per paragraph 2.4.4.5. above.

2.4.4.7. *Capacity for the reverse flow service*

Taking into account the indications of paragraph 2.4.2. and of paragraph 2.4.3.3., the storage company determines the Withdrawal Capacity in the injection phase, reserved for the Shipper Balancing Service, per paragraphs 2.4.4.5. and 2.4.4.6., and the Injection capacity in the withdrawal phase, of which only the additional capacities that become available during the Thermal Year are reserved to the Shipper Balancing Service, on the basis of the technical capabilities of the system to reverse its own flow without limiting the Performance available to the other Shippers.
However, having established the need to reverse the flow as a result of Shipper's schedules and having determined the physical set-up of the storage site, the Storage Company reserves the right to reject all or part of the subsequent variations in the Shippers' schedules for the same period that entail a further revision of the aforesaid set-up, minimising impacts for Shippers and assuring, to the best possible extent, the flow performance according to the priorities specified for mandatory services, as better described in paragraph 6.2.1. of the chapter "Injection and withdrawal reservation and commitments".
Capacities are made available and assigned according to the procedures prescribed in the chapters that follow.

2.4.4.8. *Withdrawal Extra Peak Capacity*

If the availability of the withdrawal peak during the Withdrawal Period indicates that there is an availability of PE on a continuous basis exceeding to the one prescribed by Article 10, Paragraph 2 *bis*, of Resolution no. 119/05, as amended by Article 14, Paragraph 13, of Resolution no. 50/06, and taking into account any changes to the adjustment coefficients, the Storage Company makes available to Shippers an extra PE according to the procedures prescribed in paragraph 5.9.1 and 5.9.2, subject to the need to safeguard the System.

2.4.4.9. *Capacities on an interruptible basis*

If, in the Injection Period and in the Withdrawal Period, performance becomes available, unused by Shippers or additional with respect to the Performance already available for Shippers but not guaranteeable on a continuous basis, the Storage Company offers monthly and weekly interruptible capacity, reserved for the requests of the second session of the Shipper Balancing Service, if the purchase offers exceed the offer of continuous Capacities, per paragraph 5.9.1. below. Moreover, the Storage Company may offer interruptible capacity for periods shorter than one week as provided in paragraph 3.2.3.2. below.

2.4.5 Utilisation Profiles and adjustment coefficients of the PI and PE Performance

As pointed out in the above paragraphs, the dynamic evolution of the PE and of the PI depends mainly on the following factors:

- Behaviour of the reservoirs, of the wells;
- Technical characteristics of the facilities;
- Technical-managerial constraints;
- The schedule of Maintenance Operations.

To optimise the System while assuring the greatest possible flexibility for Shippers, the Storage Company defines, for the Performance of the Modulation Service:

i. Utilisation profile and coefficients for the adjustment of the Storage capacity in the injection phase and the related range of applicability;
ii. Utilisation profile and coefficients for the adjustment of the Storage capacity in the withdrawal phase and the related range of applicability.

The Storage Company does not define utilisation profiles and/or adjustment factors for the operational balancing service, taking into account its different operating procedures and functionalities, whereas it does define, exclusively for the injection phase, the utilisation profiles for the hydrocarbon storage service, in order to assure that the assigned space is completely filled.

2.4.5.1. *Utilisation profile for the injection phase for the hydrocarbon storage service*

Utilisation profiles are defined taking into account the need for fill the assigned space and the procedures for assignment and for the allocation of the PI_M

2.4.5.2. *Utilisation profile, coefficients for the adjustment of the Storage capacity and related range of applicability in the injection phase for the modulation storage service*

The storage company defines the utilisation profile and the adjustment coefficients of the storage capacity, for the injection phase, in relation to the characteristics of its own storage system, to the schedules for periodic inspections and to the need to replenish the reservoirs assuring the appropriate flexibility to shippers.
These parameters are derived assuming the complete emptying of the S_{MOD} and according to the following criteria:

- The historical injected amounts in the previous thermal years
- Actual amount withdrawn in the previous thermal year
- Volume to be injected in order to assure the replenishment of the reservoir, including any strategic storage volume;
- Maximisation of the injection capacity in periods of highest need for Shippers, in compliance with the technical constraints;
- Assurance that the assigned space will be filled.

The utilisation profile defines the minimum and maximum stock allowed for the Shipper at the end of each month of the injection phase, in relation to the capacity assigned to the shipper. They are represented by percentage values (Gmin% and Gmax%) that, multiplied times the assigned Space, determine the range of stock within which the Shipper's stock will have to be at the end of each month.

The adjustment coefficients and the related applicability ranges, instead, are the multiplication factors to be applied to the assigned CI_{MOD} in order to determine the maximum available Injection Performance (PI_{MOD}) of the system on each day of the service.
The adjustment coefficients are such as to reflect the decreasing trend of the PI_{MOD} as a function of total filling, and any reductions in Performance consequent to works for Significant Maintenance Operations.

The Injection Performance associated to the injection capacity of each Shipper k for the modulation Service is determined on the basis of the ratio R_u applied to the overall performance of the system, determined as follows:

$$Ru_k = \frac{\max(G_{max\ u,k} - G_{i\ u,k};\ 0)}{G_{max\ s,k} - G_{min\ s,k}}$$

where:

- $G_{max\ u,k}$ is the maximum stock of the Shipper u at the end of the month k of the injection phase determined according to the provisions of paragraph 8.4.2 below;
- $G_{i\ u,k}$ is the higher amount between the minimum stock, based on the provisions of paragraph 8.4.1 below, and the actual stock of the Shipper u at the beginning of the month k of the injection phase;

- $G_{max\ s,k}$ is the maximum stock expected in relation to the total capacities available to shippers, based on their utilisation profiles, at the end of the month k;
- $G_{min\ s,k}$ is the minimum stock expected in relation to the total capacities available to shippers at the beginning of the month k, based on their utilisation profiles.

For the purposes of determining the term $G_{i\ u,k}$ for the month of April, the minimum stock according to the provisions of paragraph 8.4.1 below shall take into account the actual stock of the system as at 31 March.

If in a month k, a Shipper u has been assigned capacity within the scope of different procedures for allocation of products with seasonal or monthly injection, the terms $G_{max\ u,k}$ and $G_{i\ u,k}$ are determined on the basis of the maximum and minimum stocks referred to the capacities assigned in the different procedures.

Any available performance exceeding the quantities attributed to all shippers as determined above are attributed to shippers pro quota on the basis of the Ru ratio.

Therefore, the allocation to each shipper of any injection capacities of the system exceeding the total capacities attributed to each individual shipper through the Ru parameter is carried out on the first day of each month of the injection phase with a pro-quota criterion on the basis of the individual Ru values.

$PI_{MODk}=PI_{MOD}*Ru_k$.

If the Shipper's residual Space is smaller than the available Injection Capacity, the Injection Capacity will be equal to the residual Space.

The total available Injection Capacity is equal to the product of the total Injection Capacity assigned for the Modulation Services and the Adjustment Coefficient. The latter is the coefficient, between zero and one, which can vary as an inverse function of the total System stock, as published and kept up to date by the Storage Company on its own Website.

The utilisation profiles, the filling ranges and the corresponding adjustment coefficients are published on the Website of the Storage Company and kept up to date according to the procedures prescribed in paragraph 2.4.6 below.

If the User of the Modulation service has sold injection performance for the Shipper Balancing Service as provided by paragraph 5.7.2, the sold portion is subtracted from that Shipper's daily Injection Performance.

2.4.5.3. *Utilisation profile, coefficients for the adjustment of the Storage capacity and related range of applicability in the injection phase for the Shipper Balancing Storage service.*

The Injection Capacity assigned for the Shipper Balancing Service on a continuous and interruptible basis is not modified in relation to the Shipper's Injection or Withdrawal over time.

In addition, said capacity is equal to zero in case of complete filling of the Space available for the User of the Shipper Balancing Service and the balancing costs per chapter 8 below shall apply for all quantities injected above the available Space.

2.4.5.4. *Utilisation profile, coefficients for the adjustment of the Storage capacity and related range of applicability in the Withdrawal phase for the modulation storage service*

The storage company defines the utilisation profile and the adjustment coefficients of the storage capacity, for the withdrawal phase, in relation to the characteristics of its own storage system, assuring the appropriate flexibility to shippers.
These parameters are determined on the assumption of the complete filling of the assigned Space and based on the following criteria:

- Maintenance of the maximum available withdrawal capacity for as long as possible through hydrocarbon optimisation;
- Assurance of the maximum possible continuity of available performance;
- Complete emptying of the assigned Space, with the exclusion of the S_{STR};
- No change to the work schedule for Significant Maintenance Operations.

The utilisation profile defines the minimum stock allowed for the Shipper at the end of each month, in relation to the assigned S_{MOD}.

The adjustment coefficients and the related applicability ranges, instead, are the multiplication factors to be applied to the assigned CE_{MOD} in order to determine the maximum Withdrawal Performance (PE_{MOD}) available to the Shipper on each day of the period of validity of the assigned capacity.
The adjustment coefficients are such as to reflect the decreasing trend of the PE_{MOD} as a function of total amount withdrawn and of the amount withdrawn by each Shipper, and any reductions in Performance consequent to works for Significant Maintenance Operations.
The utilisation profiles, the filling ranges and the corresponding adjustment coefficients are published on the Website of the Storage Company and kept up to date according to the procedures prescribed in paragraph 2.4.6 below.

If the User of the Modulation Service has sold withdrawal performance for the Shipper Balancing Service as provided by paragraph 5.7.2, the sold portion is subtracted from that Shipper's daily Withdrawal Performance.

2.4.5.5. *Utilisation profile, coefficients for the adjustment of the Storage capacity and related range of applicability in the Withdrawal phase for the Shipper Balancing Storage service*

The Withdrawal Capacity assigned for the Shipper Balancing Service on a continuous and interruptible basis is not modified in relation to the Shipper's Withdrawal or Injection over time.

Said capacity is equal to zero in case of complete utilisation of the Gas owned by the User of the Shipper Balancing Service. In addition, if the Shipper withdraws a greater quantity of Gas than the Gas owned by that Shipper and present in the System, the costs per chapter 8 below shall be applied to all excess quantities withdrawn.

2.4.6 Revision of the utilisation profiles and of the adjustment coefficients

The Storage Company performs the simulations for the following Thermal Year in such a way as to allow publication of all necessary elements no later than 1 February before the start of that Thermal Year.

Taking into account the possible variations, which may be significant, tied to the ending part of the Withdrawal Phase and the possible variations in assigned capacities in accordance with paragraph 2.4.2.3 above, the simulations for the subsequent Injection Phase may be revised no later than mid-March, in order to allow Shippers to perform adequate seasonal planning.

For the same reasons, no later than mid-October, the Storage Company performs a consistency check with respect to the parameters used for the definition of the initial simulations, proceeding - for example, in case of incomplete filling of the System - to carry out a revision for the best possible operational planning by the Shippers.

The consistency check is carried out also on the basis of a joint technical analysis conducted with the transport companies.

Since the adjustment coefficients and their applicability ranges are also strongly affected by the work schedule for Significant Maintenance Operations, as defined in paragraph 13.2 of the chapter “Scheduling and Managing Maintenance Operations”, and by the response of the reservoir in terms of additional available performance as a result of the aforesaid operations, the Storage Company reserves the right to modify them if the aforesaid Significant Maintenance Operations or the performance undergo a change from the values expected at the time they are determined. The aforesaid coefficients will be changed by such an amount as to assure in any case an injection or withdrawal profile that enables to maintain at least equivalent the times for the withdrawal and injection phases provided by the previous coefficients, and the assigned value of capacity CE_{MOD}.
Changes to the adjustment coefficients shall be notified to the Shipper via registered letter, sent in advance via e-mail, and published on the Website at least 15 days before their enforcement.

The Storage Company also reserves the right to modify Utilisation profiles on a monthly basis if the actual emptying or filling over time is not consistent with the utilisation profiles in force or with the available Performance.

When redefining the utilisation profiles, the adjustment factors and their range of validity, the Storage Company takes into account the Shipper’s needs, taking all actions that can assure the greatest possible flexibility to the System.

2.5 INFORMATION PUBLISHED ON THE WEBSITE

The Storage Company publishes and updates on a yearly basis on its Website:

a. The geographic representation of the storage facilities, with their location
b. The schematic representation of the storage facilities,
c. The list of planned enhancements and disposals.
d. The Entry Point on the RNG with the indication of the interconnected transport company,

In addition, no later than 1 February of each year, the Storage Company publishes on its Website:

e. The Storage Capacities available for mandatory services, defined in paragraph 2.4.4 of this chapter;
f. The operation and maintenance plans for the storage facilities it owns;
g. The technical-managerial constraints deriving from the Significant Maintenance Operations;
h. The utilisation profiles, the adjustment factors and the applicability ranges.

CHAPTER 3

DESCRIPTION OF THE SERVICES

3.1 FOREWORD

The Storage Company provides Shippers meeting the requirements described in Paragraph 5.2 of the chapter called “Assignment of Storage Capacity” with freedom to access the storage services, equal conditions and service transparency. The service is offered in an integrated manner on the Storage System managed by the Storage Company.

When its System has available capacity and the service is technically feasible, the Storage Company is obligated to offer the following services:

- Mandatory Services: i.e. the services described in paragraph 3.2 below, regulated by this Storage Code, requested by the Shipper and carried out by the Storage Company for payment of the prices determined by the Authority.
- Special Services: i.e. the services described in paragraph 3.3 below, regulated by this Storage Code, requested by the Shipper and carried out by the Storage Company for payment of the economic conditions negotiated and subject to the approval of the Authority.
- Ancillary activities: i.e. the activities described in paragraph 3.4 below, regulated by this Storage Code, not requested by the Shipper but provided by the Storage Company because they are necessary for the correct performance of the Mandatory Services and of the Special Services.

All Storage Capacities related to the services described in this chapter are assigned according to the times and procedures prescribed in chapter 5 “Assignment of Storage Capacity”.

All Storage Services include the reservation, by the storage company, of the transport capacity required for input into the network, or for withdrawal therefrom at the entry point at the interconnection with the Storage System, of the quantities of Gas withdrawn or to be injected into the Storage System itself.

The storage company delivers these quantities to the major Transport company at the entry point corresponding with the interconnection with the Storage System, which takes delivery of them for the purposes of redelivering them to its shippers within the scope of the transport service per its own Network Code.

The major transport company delivers to the storage company the quantities of Gas owned by the users of the transport service for the purpose of their utilisation by the same users of the Storage Services.

3.2 MANDATORY SERVICES

The Storage Company makes available the following mandatory services to Shippers who request them:

1. The hydrocarbon storage service;
2. The strategic storage service;
3. The modulation storage service;
4. The balancing service for the transport companies in the system.

The Storage Company assigns the above capacities, both continuous and interruptible, according to the procedures described in chapter 5 “Assignment of Storage Capacity”.

Within the offer of the mandatory services, the Storage Company makes available to Shippers who request them, on a monthly basis, the capacities for the Shipper Balancing Service, per paragraph 2.4.4.5, and assigns them in accordance with paragraph 5.9.1 below.

Without prejudice to Shippers’ freedom of choice with regard to the procedures for allocating the requests for the aforesaid services to storage companies, the Storage Company coordinates with the Major Storage Company to verify that the Shippers have exercised only once the priority rights per chapter 5 “Assignment of Storage Capacity”.

Without prejudice to the continuous nature of the Performances, for all mandatory services the Storage Company shall in any case have the right to interrupt the performance in cases of Force Majeure, Emergency and Maintenance Operations that cause a reduction/interruption of the Performances, as defined in chapter 13 “Scheduling and Managing Maintenance Operations”.

3.2.1 Hydrocarbon Storage Service

The hydrocarbon storage service is necessary for technical and economic reasons to enable holders of exploitation concessions to carry out the optimal exploitation of natural gas reservoirs in Italy.

Therefore, the sole purpose of the Hydrocarbon service is to provide exploitation title holders with a level of flexibility comparable to the one provided normally in the Gas import agreements, and to hedge any technical risks of production shut-down.

The requestable capacities are defined by the MSE and allocated among storage companies as established by the Authority.

The service consists of making available to the Shipper a Space (S_M), an Injection Performance (PI_M) and a Withdrawal Performance (PE_M).
The Shipper to which the hydrocarbon storage capacities are assigned acquires the right to:

- Daily inject a quantity of Gas no greater than the PI_{Mk} during the Thermal Year;
- Daily withdraw a quantity of Gas no greater than the PE_{Mk} during the Withdrawal Period and in the Periods.

Where PI_{Mk} and PE_{Mk} are respectively the Withdrawal Performance and the Injection Performance guaranteed to the K-th Shipper by virtue of the assignment of a capacity CI_{MK} and CE_{MK}., as defined in paragraphs 2.4.4.3 and 2.4.5 of chapter 2 “Description of the system”.

The PE_{MK} is equal to zero if the Shipper has withdrawn all the gas it owns, held in storage for the purposes of the Hydrocarbon storage service; moreover, the Shipper loses the right to reserve an injection performance if it has injected a quantity of gas equal to the space S_{MK} assigned to it.

In addition to the aforesaid performance, a User of the Hydrocarbon Storage service has the right to request the assignment of an Interruptible Incremental Peak.

3.2.2 Strategic Storage Service

The strategic storage service is offered by the Storage Company to the party that imports Gas produced in Countries not belonging to the European Union, for the purposes of fulfilling the obligations per article 3 of Italian Legislative Decree no. 164/00 and related implementing decrees.

The service consists of making available to the Shipper a Space and a quantity of Gas owned by the Storage Company equal to the assigned Space.

For the additional quantities of strategic reserve with respect to the quantities of gas owned by the Storage company:

- The storage company acquires the missing quantities of Gas through a competitive procedure;
- The Shipper may request only the space capacity and to use Gas it owns.

3.2.3 Modulation Storage Service

The modulation storage service is directed at enabling to modulate gas delivery according to daily, seasonal and peak consumption trends. This service is charged to all shippers entitled to the storage services.

The service consists of making available to the Shipper a Space (S_{MOD}), an Injection Performance (PI_{MOD}) and a Withdrawal Performance (PE_{MOD}).
The Shipper to which the modulation storage capacities are assigned acquires the right to:

- Daily inject a quantity of Gas no greater than the PI_{MODk} during the Thermal Year or for periods shorter than the Thermal Year in case of assignment during the Thermal Year, for the seasonal product;
- Daily inject a quantity of Gas no greater than the PI_{MODk} during a single month of the Injection Period of the Thermal Year, for the monthly product;
- Daily withdraw, both for the seasonal and for the monthly product, a quantity of Gas no greater than the PE_{MODk} during the Withdrawal Period and in the Periods.

Where PI_{MODk} and PE_{MODk} are respectively the daily Withdrawal Performance and the Injection Performance guaranteed to the K-th Shipper by virtue of the assignment of a capacity CI_{MODK} and CE_{MODK}., as defined in paragraphs 2.4.4.4 and 2.4.5 of chapter 2 “Description of the system”.

The Injection Performance assigned to each Shipper for the Modulation Service is determined on the basis of the ratio $R_{u,k}$ per paragraph 2.4.5.2. If the Shipper’s residual Space is smaller than the available Injection Capacity, the Injection Capacity will be equal to the residual Space.

The PE_{MODK} is equal to zero if the Shipper has withdrawn all the gas it owns, held in storage for the purposes of the Modulation Storage Service; moreover, the Shipper loses the right to reserve an injection performance if it has injected a quantity of gas equal to the space S_{MODK} assigned to it.

Moreover, a User of the Modulation Storage Service is entitled to request the assignment of a PII_M for periods of less than one month, or for monthly periods, to request access to the Shipper Balancing Service.

3.2.3.1. Reverse flow service

The reverse flow service consists of making available to the Shipper:

a) A withdrawal capacity in the Injection Period made available under the Shipper Balancing Service, and/or;
b) An injection capacity in the Withdrawal Period assigned at the start of the Thermal Year and the additional capacities, reserved to the Shipper Balancing Service, as provided in paragraphs 2.4.4.5 and 2.4.4.6.

The Reverse flow service provided by the Storage Company is defined Virtual when the total amount of the Shipper's reverse flow reservations is smaller than the Daily Planned Flow Rate flowing on the Hub.
If the Reverse flow service reserved by all Shippers as a whole is greater than the Daily Planned Flow Rate flowing on the Hub, the reverse flow is instead defined Physical, in that it needs to reverse the motion of the storage gas with respect to the condition existing at the time of the reservation.

The Storage Company makes available to Shippers the capacities for the reverse flow service consistently with the characteristics of its own storage system; therefore the Shipper to which a capacity is assigned for the aforesaid service acquires the right to use the reverse flow according to the procedures provided in paragraph 2.4.4.6 and the times indicated in subparagraph 6.2.1 of the chapter "Injection and withdrawal reservations and commitments".

The Injection Flow Rate (PI) during the Withdrawal Period, as defined in subparagraph 2.4.3.3 of chapter 2 "Description of the system", and the withdrawal capacity during the injection phase are assigned according to the procedures indicated respectively in paragraphs 5.8.2.4, 5.9.1 and 5.9.2 of the chapter "Assignments of the storage capacities".

3.2.3.2. Monthly Interruptible Incremental Peak (PII_M) in injection and/or withdrawal

If the Shippers' monthly reservations, which arrive according to the procedures and times prescribed in paragraph 6.4, are lower than the maximum quantities

that can be moved in the month, the Storage Company makes available for the Shipper Balancing Service a monthly or weekly interruptible injection or withdrawal capacity for periods of less than one week (daily assignments) for all other storage services.
The Shipper that intends to use the aforesaid capacities must submit an assignment request according to the procedures indicated in subparagraphs 5.7.1 and 5.9.3.

The Shipper to which a PII_M is assigned, according to the procedures described in paragraph 5.9.1 and 5.9.3, acquires the right to reserve, for the month M when the performance was assigned, an interruptible incremental withdrawal or injection flow rate with respect to the PI or to the PE guaranteed to it, regulated as described below.
If the difference between the continuous total Capacity available for a given Day and the total Capacity actually recorded is lower than the interruptible incremental Capacity assigned for the same Day, the Storage Company will allocate the aforesaid difference pro-rata to the Shippers to whom interruptible incremental Capacity has been assigned.
If the aforesaid difference is equal to zero, the interruptible incremental Capacity will not be made available.
The interruption of a part or all of the Interruptible Capacity is communicated by the Storage Company to the Shippers, to whom it was assigned, on the Day after the interruption. In such cases, the Storage Company considers subject to the balancing costs, per paragraph 8.3, the quantity of Gas that, allocated to the Shipper on the Day, is greater than the sum of the total Capacity available for that Shipper on a continuous basis and than any portion of Interruptible Capacity that was not interrupted.

The Storage Company applies to Shippers to whom interruptible capacity has been assigned for periods of less than one month the unit daily costs, approved by the Authority, according to the following formula:

$$I_{PIIM}=n_{GCI}/n_a*(f_{PI} * \sigma_{MI})* PIIM_I+n_{GCE}/n_{GE}*(f_{PE} * \sigma_{ME})*PIIM_E$$

Where:
$PIIM_I$ is the interruptible peak injection performance for periods of less than one month assigned in the days G;
$PIIM_E$ is the interruptible peak withdrawal performance for periods of less than one month assigned in the days G;

- σ_{MI} is the monthly reduction coefficient applied to the cost f_{PI} published on the Website of the Storage Company;
- σ_{MI} is the monthly reduction coefficient applied to the cost f_{PE} published on the Website of the Storage Company;

- n_{GCI} is the number of days of assignment of the injection Interruptible Incremental Peak for periods of less than one month;
- n_a is the number of days of the Thermal Year;
- n_{GCE} is the number of days of assignment of the withdrawal Interruptible Incremental Peak for periods of less than one month;
- n_{GE} is the number of days of the withdrawal phase.

3.2.3.3. Withdrawal extra peak

If the availability of the withdrawal peak during the Withdrawal Period indicates that there is an availability of PE on a continuous basis exceeding the one prescribed by Article 10, Paragraph 2 bis, of Resolution no. 119/05, as amended by Article 14, Paragraph 13, of Resolution no. 50/06, and taking into account any changes to the adjustment coefficients, the Storage Company makes it available to the Shipper for the Shipper Balancing Service and assigns it in accordance with subparagraph 5.9.1 of the chapter “Assignment of storage capacity”.

3.2.4 The operational balancing service for the transport companies (or Balancing System)

The Storage Company makes available to Transport Companies, for the physical balancing of their network, a storage service, defined according to the balancing needs of the Transport Company.
The service makes available to the Transport Company a Space (S_{BIL}) and an Injection Flow Rate (PI_{BIL}) and a Withdrawal Flow Rate (PE_{BIL}), by virtue of the assignment of a capacity CI_{BIL} and CE_{BIL}., as defined in paragraphs 2.4.4.2 and 2.4.5 of the chapter “Description of the system”.

If the total movements requested by the other Users of the storage service are not adequate to assure the balancing of the system, the Transport Company will be entitled, in the fulfilment of the aforesaid requests, to use an adequate daily injection and/or withdrawal performance to assure balancing even if it exceeds the performance assigned at the start of the thermal year.

3.2.5 Shipper Balancing Service

The balancing service for all transport Shippers is offered by the storage company in compliance with the obligations per the resolution of 2 November 2009, ARG/gas 165/09.

Access to the Shipper Balancing Service enables the shipper to:

- Use the Space (S_{BUk}) assigned in accordance with paragraph 5.9.1;
- Inject its own Gas into the System during the requested month
- Withdraw its own Gas from the System during the requested month

For the purposes of the offer of the Shipper Balancing Service, the Storage Company makes available for the first session the related S_{BU}, CI_{BU} and CE_{BU} determined in accordance with paragraph 2.4.4.5, together with the sale offers of the User of the Modulation System per paragraph 5.7.2 below.
The Storage Company makes available, solely for the second assignment session per paragraph 5.9.1 below, the following monthly or weekly Capacities on an Interruptible basis:

a) The Injection Capacity and the Withdrawal Capacity on an interruptible basis, determined, if in phase, in accordance with paragraph 2.4.4.5, and regulated in accordance with paragraph 3.2.3 above.
b) The Injection Capacity and the Withdrawal Capacity on an interruptible basis, determined, if in reverse flow, in accordance with paragraph 2.4.4.5 above and regulated as follows:

- *Withdrawal Period*

  If the difference between the continuous total Injection Capacity available for a given Day and the Injection actually recorded is lower than the interruptible Reverse Flow Capacity assigned for the same Day, the Storage Company will allocate the aforesaid difference pro-rata to the Shippers to whom interruptible Reverse Flow Capacity has been assigned.
  If the aforesaid difference is negative, the interruptible Reverse Flow Capacity will not be made available.
  The interruption of a part or all of the Interruptible Capacity is communicated by the Storage Company to the Shippers, to whom it was assigned, on the Day after the interruption. In such cases, the Storage Company considers subject to the balancing costs, per paragraph 8.3, the quantity of Gas that, allocated to the Shipper on the Day, is greater than the sum of the total Capacity available for that Shipper on a continuous basis and than any portion of Interruptible Capacity that was not interrupted.

- *Injection Period*

If the difference between the continuous Reverse Flow Capacity available for a given Day and the Withdrawal actually recorded is lower than the interruptible Reverse Flow Capacity assigned for the same Day, the Storage Company will allocate the aforesaid difference pro-rata to the Shippers to whom interruptible Reverse Flow Capacity has been assigned.
If the aforesaid difference is negative, the interruptible Reverse Flow Capacity will not be made available.
The interruption of a part or all of the Interruptible Capacity is communicated by the Storage Company to the Shippers, to whom it was assigned, on the Day after the interruption.
In such cases, the Storage Company considers subject to the balancing costs, per paragraph 8.3, the quantity of Gas that, allocated to the Shipper on the Day, is greater than the sum of the total Capacity available for that Shipper on a continuous basis and than any portion of Interruptible Capacity that was not interrupted.

3.3 SPECIAL SERVICES

To promote market liquidity and a more flexible use of natural gas storage, the Storage Company is willing to consider Shippers' requests for services whose technical-economic characteristics differ from those defined for the other services described in the Storage Code.
If the service requested is technically feasible without compromising the storage capacities already assigned to other Shippers, the economic conditions will be negotiated between the Storage Company and the Shipper and subsequently sent to the Authority for approval, in compliance with the provisions of the Resolution, as indicated in paragraph 4A.7 of the Annex "Table of Times and Methods of Information Coordination".

3.4 ANCILLARY ACTIVITIES

3.4.1 Management of the capacity assignment

Within the assignment activity, the Storage Company agrees with the Major Storage Company the procedures for the verification of the quantities assignable and assigned, publishes the available capacities and the necessary forms, manages the procedure for assignment requests, verifies the assignable capacities with the Major Storage Company, carries out the assignment and prepares and executes the Contracts.

3.4.2 Management of capacity transactions

The Storage Company defines the procedures for requesting capacity transactions, makes available a suitable dedicated section on the Electronic System and publishes any specialised forms also on the Website for back-up cases, and it performs the administrative operations connected with the transactions.

3.4.3 Dispatching

With regard to this activity, the Storage Company carried out the actions defined in chapter 2.

3.4.4 Allocations of gas

Within this activity, the Storage Company manages the process for the allocation, as well as the process for the adjustment of the measured quantities of gas injected and/or withdrawn in accordance with the procedures prescribed by chapter 8 “Balancing and replenishment of the storage sites”.

3.4.5 Gas measurement and quality

The Storage Company carries out the operations for obtaining and validating the measurement data at the inlet and outlet of each site of the System, and it verifies, measures and validates the gas quality parameters for the purposes of determining the moved energy and of meeting quality specifications.

3.4.6 Management of storage data

The storage company manages and files the data exchanged with the Shipper and publishes the information, using IT instruments, including the Electronic System, and its own website, which also includes a reserved section.

3.4.7 Balancing costs

The Storage company calculates and invoices the balancing costs and those for the use and replenishment of the strategic reserve, in accordance with chapter 8 “Balancing and replenishment of the storage sites”.

3.4.8 Maintenance Operations

The Storage Company carries out all inspection, upgrade and maintenance operations on the facilities in order to assure the safety and continuity of the

service. It prepares a schedule of the operations, with the exception of unforeseeable ones, which it publishes and constantly updates in accordance with the procedures prescribed in Chapter 13 “Scheduling and Managing Maintenance Operations”.

3.4.9 Managing emergencies

The Storage Company has internal procedures and personnel that enable it to manage, efficiently and minimising the impact on available capacities, the unforeseen and transitional situations that prevent or limit the normal operation of the System.

3.4.10 Managing general emergencies

Within general emergencies, the Storage Company performs all operations prescribed by the procedures defined by the MSE.

3.4.11 Invoicing

The Storage Company manages the entire process for issuing and adjusting invoices in accordance with the provisions of chapter 16 “Invoicing and Payments”.

3.5 ACCESS TO THE TRANSPORT SYSTEM

3.5.1 Assignment and reservation of the transport capacity

Under resolution 297/2012/R/gas, the storage company requests transport capacity for the purposes of providing its services to the Shipper and becomes, in accordance with the indications received from its own Shippers, responsible for obligations descending from the related transport contract, instrumental for the injection and the withdrawal of the Gas owned by its Shippers respectively at the inlet point and of the outlet point of the national network of the pipelines interconnected with the Storage Sites.

The aforesaid obligations include planning the quantities injected and withdrawn, owned by each Shipper, at the aforesaid points, and meeting quality and pressure parameters.

CHAPTER 4

INFORMATION COORDINATION PROCEDURES

4.1 FOREWORD

The chapter describes the characteristics of the systems for the exchange of data and information between the Shippers and the Storage Company. It also describes the procedures for accessing and using the information system and the Parties' obligations.
The set of information systems provided by Edison Stoccaggio on an Internet platform for the computerised management of the services offered and for the exchange of data and communications between Edison Stoccaggio and the Shippers as provided by this Code, consists of the Website of the Storage Company and of the Electronic System. To access it, the Shipper must have an available browser with the most up to date Internet technology or otherwise compatible with the requirements of the technical specifications of the Website and of Escomas. While non-fulfilment of this requirement would not be relevant for the purposes of the execution of the Storage Contract, it may compromise the efficient exchange of data with Edison Stoccaggio. The Website and Escomas are the sole instruments through which the Shipper can schedule the utilisation of the storage services, view the contracts stipulated with Edison Stoccaggio and all the other information as specified in the following paragraphs. Edison Stoccaggio undertakes to implement, supplement and/or modify the Website and Escomas, as well as the information and applications contained therein, with a view to improving the exchange of data and information with the Shippers in relation to the development of the offered services.
Possession of adequate competence in the use of the information systems on the part of the Users of the service is not binding for the execution of the Storage Contract. However, it is a fundamental technical requirement to assure an effective exchange of data. Therefore, prolonged improper utilisations of the system can constitute grounds for termination of the Contract, as described in paragraph 17.4 of the chapter "Responsibilities of the Parties".

4.2 INFORMATION SYSTEMS

4.2.1 Description of the Information Systems

To manage natural gas storage activities and the exchange of data between the Users of the service and the Storage Company, the following IT instruments are used:

1. Electronic System, defined as the set of information systems provided by the Storage Company on Internet platform to support the commercial management of

its own services and allow the exchange of data and of information with the Users of the service and the involved community;
2. Website, institutional site of the Storage Company
3. Electronic mail used by the Storage Company for communications with the Shippers and the community involved in case of malfunction of the Electronic System or Certified Electronic Mail when expressly prescribed by the regulations and by the regulatory framework in force;
4. Some components of the Microsoft Office package (Excel e Access), which the Storage Company uses to process the data of the storage activities, pertaining to the obligations deriving from the Contract;
5. Architecture of the information network of the Storage Company, appropriately dimensioned and utilised, among other services, for archiving the data associated to the storage service.
6. Fax in case of simultaneous malfunction of Website, Electronic System, Certified Electronic Mail.

4.2.2 Access and utilisation of the information system

The transmission of data from the Shippers to the Storage Company and from the Storage Company to the Shippers, takes place, unless otherwise specified, through the use of Escomas and/or access to the Website.
If it is impossible to use Escomas or the Website, data can be sent from/to the Shipper via email or Fax to the number made available at the Website of the Storage Company.

The Website allows Shippers to access the relevant data and information for the purposes of the Contract through:

1. A reserved Section, protected with user-id and password, accessible by registering. This section allows to publish and share confidential documents and data with Authorised Users from any Internet workstation;
2. Newsletters service, which allows to manage and send Newsletters to Shippers;
3. File sharing, through the publication on the Website of one or more areas accessible to Shippers (by means of user-id and password) where data and documents can be shared, arranged in folders accessed exclusively by each user;
4. A non-reserved section, where the Company publishes all information prescribed by the Storage Code, for example the Storage Code and the operating procedures in force, the description of the facilities, the maintenance plans, the available capacities, the Tariffs in force and other information useful for better communication between the Storage Company and the involved parties.

Escomas enables Shippers to access, through dedicated templates, all contractual data and information, among which the following are highlighted:

- Contractual position in terms of capacity assigned for each individual Contract stipulated between Shipper and Storage Company and related revisions as a result of capacity transfers and sales;
- Annual, seasonal, monthly, weekly and daily operational planning;
- Daily, weekly and monthly, definitive and adjustment allocations, assigned to the Shipper by the Storage Company, Injection and Withdrawal consumption attributed to the Shippers;
- Storage position in terms of inventory, including any sales or transfers of Capacity, sale or purchase of Gas;
- Status of invoicing, accounting documents, related information and elements for their calculation;
- Administrative documentation, e.g. “fiscal invoices” which record the quantity of Gas owned by the Shipper;
- Other documentation.

In addition, Escomas enables Shippers to access templates dedicated to additional matters, e.g.:

- Registration of the User who has the proper credentials for the application;
- Requests for access to the services;
- Assignment of storage capacity on an annual, monthly, weekly basis and for periods of less than one week;
- Maintenance schedules, published and revised by the Storage Company according to the times and procedures prescribed in this Code;
- Utilisation profiles, adjustment factors and connected information;
- Amounts of gas moved by the Storage Company at the Storage System level, in the Injection and Withdrawal phase;
- Capacities available for the services offered;
- Schedule of the main deadlines for the Shipper and for the Storage Company;
- Any other information.

Shippers must access Escomas to use the services offered by the Storage Company, enter or receive the information about the management of the Storage Contract, because it represents, unless otherwise specified, the official interaction instrument for the functionalities described above between the Storage Company and Shippers according to the procedures and times described in the paragraphs below.

Annex 4A summarises the procedures for the exchange of information between Users of the service and the Storage Company for the following activities:

1. Assignment of storage capacities at the start of the thermal year;
2. Assignment after the start of the thermal year:
3. Injection and withdrawal reservations and commitments;
4. Capacity and gas volume transactions;
5. Allocations and Adjustments;
6. Request for special Services.

The minimum competencies Shippers must have for an efficient exchange of data are:

7. Adequate knowledge of management of Electronic Mail;
8. Adequate knowledge of the instruments of the Microsoft Office package (in particular MS Excel);
9. Adequate knowledge of the Internet.
10. Knowledge of the Electronic System

4.2.2.1. Security of the information systems

The Storage Company and the Users of the service are responsible for the security and protection of the data exchanged through the information systems.
Both undertake to ensure that their own data and system are provided with adequate levels of security.

4.3 OBLIGATIONS OF THE SHIPPERS AND OF THE STORAGE COMPANY

4.3.1 Shippers' obligations

With regard to the exchange and management of information with the Storage Company, Shippers undertake to adopt the appropriate control and prevention measures to assure data security and protection.
The Shipper is obligated promptly to inform the Storage Company if a data transmission is contaminated by viruses, the transmitted data are deteriorated, or an improper use of the system is made. The Shipper shall contact the Storage Company through the channels defined in the Company's site and comply with the instructions and obligations set out therein.
The Shipper is obligated to use, to exchange data, the forms predefined by the Storage Company[1] and available on Escomas or on the Website of the Company.

[1] All declarations to be provided shall be understood to be "Declarations in lieu of affidavits", thus signed by the legal representative or by a person vested with adequate powers (the forms for the declaration of validity of the powers of representation are available on the Electronic System and, if the system is not available, at the Website of the Storage Company).

The Requesting User is obligated to provide the Storage Company, at the time of the Request for access to the Electronic System as prescribed in Paragraph 4.3.1.1, a list of reference contacts with the Shipper who will be the only persons authorised to access and utilise the application for the exchange of data and information.
The same authorised person shall be entitled to request, through Escomas, the creation of additional user accounts delegated to operate on behalf of the Shipper.
The Shipper further undertakes to keep updated the list of contacts and to process the personal data of the Storage Company in full compliance with Law no. 675 of 31 December 1996 as amended.
The Shipper is also exclusively liable for any errors in the data entered in the Electronic System.
In case of improper use of the Electronic System, expressly including the attempt to access the data of other Shippers or of the Storage Company by the Shipper (or, by way of example, of its employees, contractors, agents or subcontractors), all costs, expenses, any losses and charges incurred by the Storage Company shall be charged to the Shipper as a consequence of said improper use. The Shipper shall also act immediately to prevent the reoccurrence of such situations.
In any case, the early termination of the Storage Contract shall remain applicable, in accordance with paragraph 17.4.

4.3.1.1. Access to the Electronic System

Access to the Electronic System takes place upon registration by the requesting party on the system itself, transmission of the Request for access to the Electronic System and acceptance thereof after verification of the suitability of the submitted documentation.
The Request for access to the Electronic System, prepared per the form published by Edison Stoccaggio on its own IT system, shall necessarily contain:

a) The express and full acceptance of the provisions per this Storage Code, including those contained in the related annexes;
b) The declaration by the requesting party that it has an available IT system compatible with the IT systems of Edison Stoccaggio.

The Request for access to the Electronic System shall also be accompanied by:

c) The declaration in lieu of certification per Italian Presidential Decree no. 445/2000, attesting that the signer of the Request for Access is vested with the powers of representation, in accordance with the form provided on its own IT system.

The Requesting User shall send the information prescribed by this paragraph no later than the 5th working day preceding the deadline for access to the service which (s)he intends to use.

Each requesting user shall notify the Storage Company, when registering on the Electronic System, of at least one user who will be authorised to access it to use the services offered for the management of the relations with the Storage Company and to view the information pertaining to the individual Shipper. The Storage Company shall provide Shippers with a User-id and a temporary Password for access to Escomas.
The authorisation will enable the Shipper to access solely his/her own data.
The Shipper is responsible for correct use of his/her User-id and Password and shall immediately notify the Storage Company of any changes in the data relating to Escomas users.
In case of termination of the Storage Contract, the Storage Company shall disable the Shipper's access to Escomas, deleting the data relating to persons no longer authorised to access the data available in the portal.

4.3.2 Obligations of the Storage Company

The Storage Company communicates with the Shippers and with the other operators by means of the information instruments defined in subparagraph 4.2.1 et seq.
With regard to the exchange and management of information with the Shippers, the Storage Company undertakes to adopt the appropriate control and prevention measures to assure data security and protection.
The Storage Company is obligated promptly to notify the Shipper of any cases of interruption of the service, to identify a back-up solution for the data exchange procedures and to communicate it in a timely manner to the users of the service.
The Storage Company further undertakes to process the personal data of the Shippers in full compliance with Law no. 675 of 31 December 1996 as amended.
In particular, the Storage Company guarantees the confidentiality of the data, processing them and archiving them in its own private information system and ensuring that they are not accessible outside the system.

4.3.2.1. Available data

The data available within the Electronic System pertain to the current Thermal Year and to the two previous Thermal Years during which it was used. For data pertaining to previous Thermal Year or not present in the system, the Shipper shall request the information sought from the Storage Company.

4.4 TRAINING

The Storage Company makes available to the Shipper an on-line support manual for the use of Escomas, available on the Website of the Company, and it shall organise training sessions for the Shippers on the specific features of the system and on

subsequent updates or additions thereto. The Storage Company does not require any compensation for these training sessions, whose attendance is limited to no more than 3 trainees per Shipper.

The Storage Company makes available to Shippers a telephone service to provide information and assistance with regard to Escomas. The telephone number of this service is published on the Website of the Storage Company.

ANNEX 4A

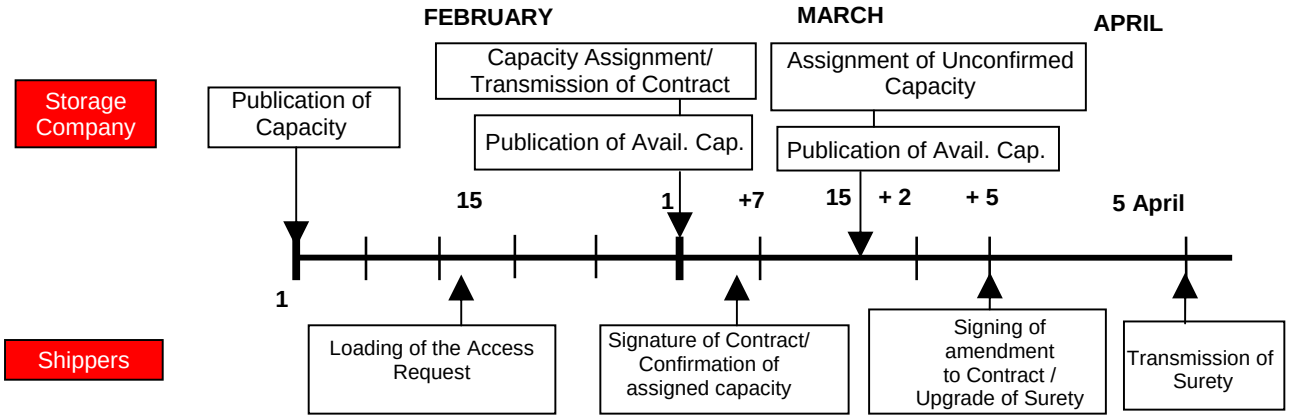
TABLE OF TIMES AND METHODS OF INFORMATION COORDINATION

4A.1 FOREWORD

The chapter describes the procedures for the exchange of information between the Shipper and the Storage Company and the related timetable. Unless otherwise specified, if the time limit indicated herein falls on Saturday, Sunday or on a holiday, said time limit shall be understood to be extended to the first subsequent working day.

4A.2 ASSIGNMENT OF STORAGE CAPACITIES AT THE START OF THE THERMAL YEAR (REF. PAR. 5.8)

4A.2.1 Hydrocarbon Storage Service and Operational Balancing Service for Transport Companies

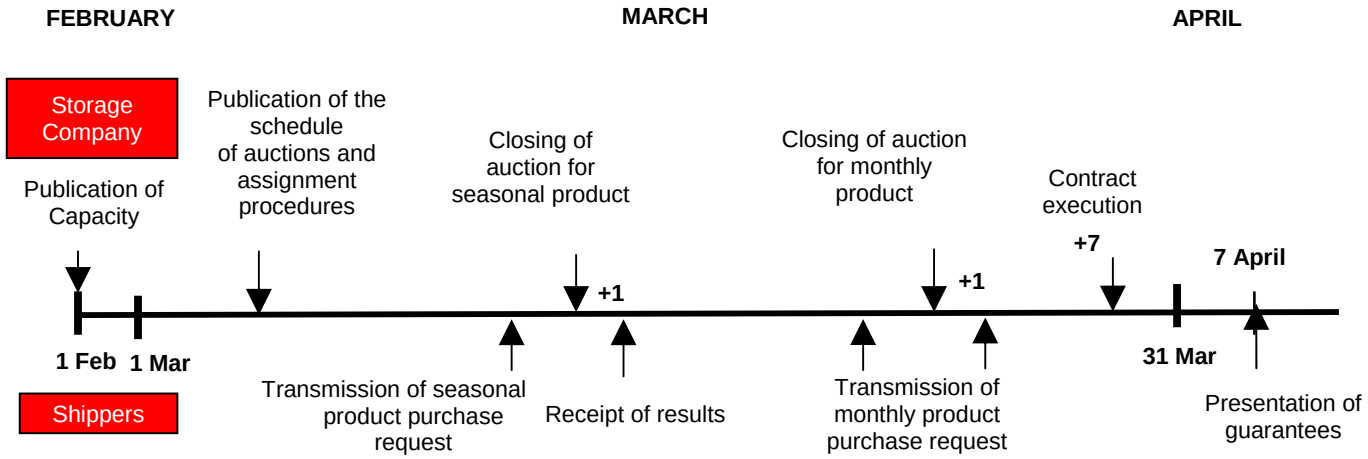


Requests for access to the services and assignment of capacity					
Activity	***By***	***When***	***How***	***Form***	***Relevant information and documents***
Publication of the Storage Capacities	• Storage Company	• No later than 1 February	• Website of the Storage Company		
Loading of the Access Request	• Requesting User	• No later than 5 February for the other mandatory services • No later than 15 February for the modulation storage service	• Filling out the request through Escomas and transmission of originals by certified mail	• Yes downloadable after data are entered on Escomas (also available on the Website)	• The Requesting User must attach the documentation relating to fulfilment of all requirements for access (forms available on Escomas); • If the User requests the performance of one or more services, (s)he must separately indicate the quantities requested for each service. • If the Requesting User is not a registered User, (s)he must register on Escomas and demonstrate that (s)he meets all requirements for access to the storage services according to the time limits set out in par. 4.3.1.1.
Assignment of the Storage capacity / Transmission of Storage Contract	• Storage Company	• No later than 1 March	• Via Escomas		
Publication of available capacity	• Storage Company	• No later than 1 March	• Website of the Storage Company		
Signing of Storage Contract	• Shippers	• No later than 7 working days from receipt of the Contract	• Advance transmission via Escomas, transmission of originals by certified mail		
Assignment of unconfirmed capacity	• Storage Company	• 2 working days after 15 March	• Via Escomas.		
Publication of capacity still available	• Storage Company	• 2 working days after 15 March	• Website of the Storage Company		
Signing of amendment to contract / Upgrade of Surety	• Shippers	• No later than 5 working days from the previous deadline	• Advance transmission via Escomas, transmission of originals by certified mail		

Requests for access to the services and assignment of capacity					
Activity	***By***	***When***	***How***	***Form***	***Relevant information and documents***
Transmission of Surety	• Shippers	• No later than 5 April	• Advance transmission via Escomas, transmission of originals by certified mail		

4A.2.2 Modulation Storage Service

The paragraph describes the procedures for the exchange of information between the Shipper and the Storage Company and the related timetable.
Unless otherwise specified, the dates per the following timetable are shown in the schedule of the auctions and in the procedures for the assignment of the seasonal and monthly products published on the Website of the Storage Company before the start of the competitive procedures for the assignment of the storage capacity. If the time limit indicated herein falls on Saturday, Sunday or on a holiday, said time limit shall be understood to be extended to the first subsequent working day.

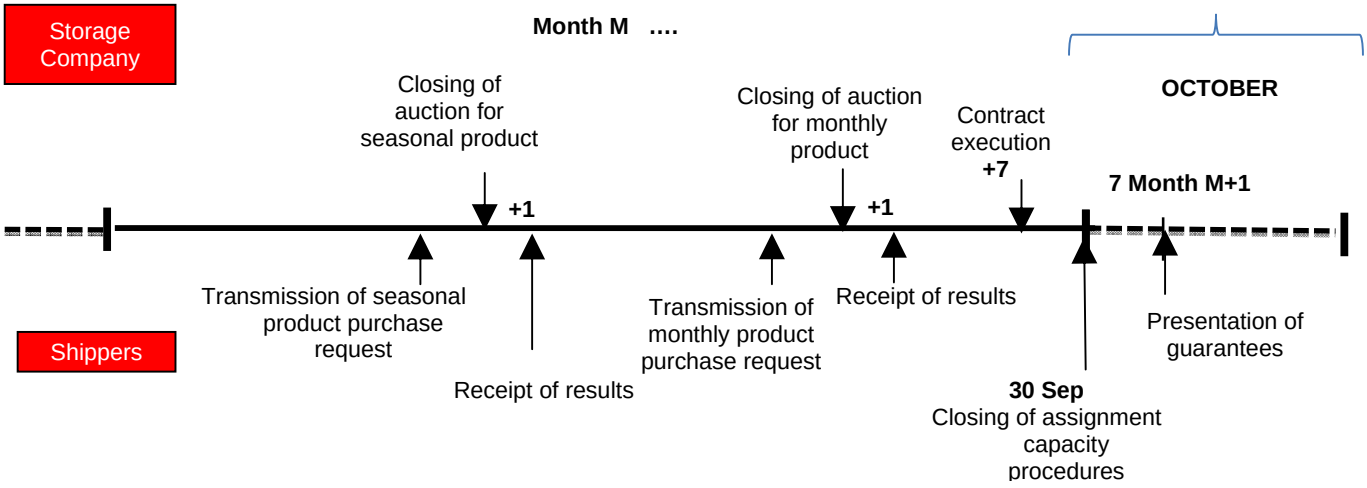


Requests for access to the services and assignment of capacity					
Activity	***By***	***When***	***How***	***Form***	***Relevant information and documents***
Publication of the Storage Capacities Available for the Modulation Service	• Storage Company	• 1 February	• Website of the Storage Company		
Publication of the Capacities Available for the Peak Modulation Service for Seasonal Product	• Storage Company	• In accordance with Schedule of Auctions	• Website of the Storage Company		
Transmission of the Access Request	• Requesting User	• In accordance with Schedule of Auctions	• Filling out the request through Escomas and/or transmission of originals by certified mail	Attachment to the Assignment Procedure	• Indicated in the Assignment Procedure
Closure of Auction and Notification of outcome to Requesting Users	• Storage Company	• In accordance with Schedule of Auctions	• Via Escomas		
Assignment of the Storage capacity	• Storage Company	• No later than one day from the auction closure	• Via Escomas		
Publication of any Capacities Available for the Peak Modulation Service for Seasonal Product	• Storage Company	• In accordance with Schedule of Auctions	• Website of the Storage Company		
…. Same steps as prescribed for the Seasonal product	• …	• …	• …	…	…

Requests for access to the services and assignment of capacity					
Activity	***By***	***When***	***How***	***Form***	***Relevant information and documents***
Signature of Storage Contract	• Shippers	• No later than 7 working days from receipt of the Contract	• Advance transmission via Escomas, transmission of originals by certified mail		
Signature of amendment to contract / Upgrade of Surety	• Shippers	• No later than 5 working days from the previous deadline	• Advance transmission via Escomas, transmission of originals by certified mail		
Transmission of Surety	• Shippers	• No later than 7 April •	• Advance transmission via Escomas, transmission of originals by certified mail		
Possible procedure for Uniform Service (same steps as the Peak Service)	• …	• …	• …	…	…

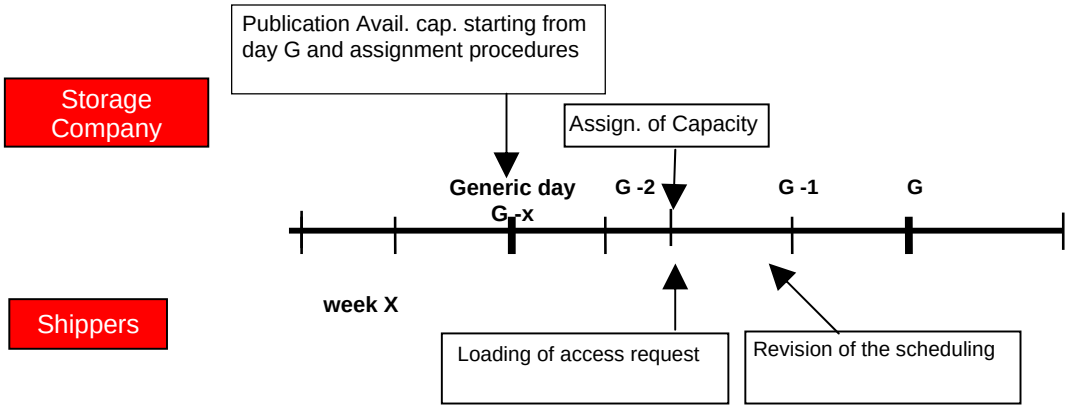
4A.3 ASSIGNMENT AFTER THE START OF THE THERMAL YEAR (REF. PAR. 5.9)

4A.3.1 Modulation Storage Service



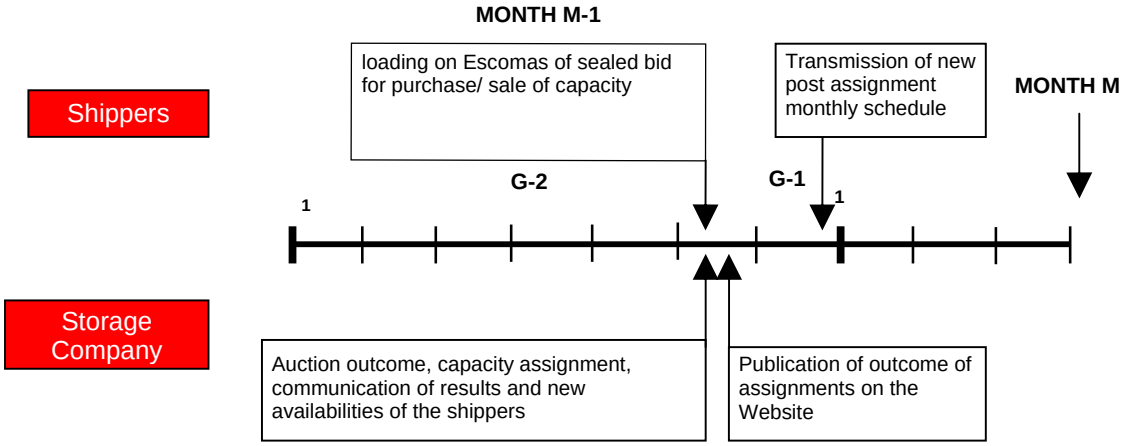
The same procedural requirements prescribed for assignment at the start of the thermal year apply.

4A.3.2 *Request for access to the Interruptible Incremental Peak performance for periods of less than one week*



Request for access to the Interruptible Incremental Peak performance for periods of less than one week					
Activity	***By***	***When***	***How***	***Form***	***Relevant information and documents***
Publication of available capacity starting from day G	• Storage Company	• as specified on the Website	• Website of the Storage Company • Escomas		
Loading of the request for access to the Interruptible Incremental Peak performance for periods of less than one month	• Shipper	• as specified on the Website	• Advance transmission via-Escomas • Transmission of originals by certified mail	• Yes downloadable after data are entered on Escomas (also available on the Website)	• Requested capacity and days for which the assignment is requested
Assignment of the Interruptible Incremental Peak for periods of less than one week	• Storage Company	• No later than 4 pm of the working day specified on the Website	• Via Escomas		
Transmission of new schedule for the assignment period	• Shipper	• No later than 1 pm of the working day after the assignment date	• Via Escomas		

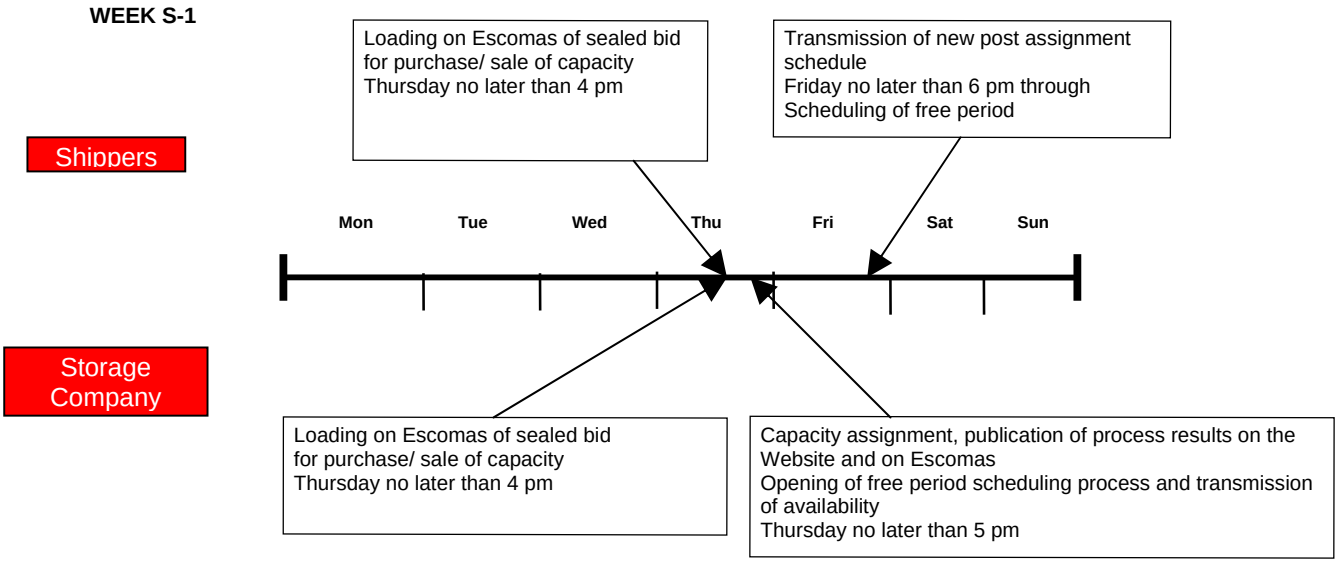
4A.3.3 Timeline for the access and performance of the monthly shipper balancing service



Request for access to the monthly shipper balancing service					
Activity	***By***	***When***	***How***	***Form***	***Relevant information and documents***
Request for access to the shipper balancing service	• Authorised user on Escomas	• No later than 2 pm of the next to last working day of the month preceding the performance of the requested service	• Transmission of Service Access Request through Escomas	• Yes downloadable after data are entered on Escomas (also available on the Website)	The capacity purchase bid must contain: • Adequate guarantee for the required purchase commitment • Financial soundness • Size of the capacities to be purchased • Purchase price for each type of capacity requested • If the Requesting User is not a registered User, (s)he must register on Escomas and demonstrate that (s)he meets all requirements for access to the storage services according to the time limits set out in par. 4.3.1.1. The capacity sale bid must contain: • Size of the capacities to be sold • Sale price for each type of capacity requested

Request for access to the monthly shipper balancing service					
Activity	***By***	***When***	***How***	***Form***	***Relevant information and documents***
Competitive procedure	• Storage Company through Escomas	• No later than 2 pm of the next to last working day of the month preceding the performance of the requested service	• Assignment procedures specified in paragraph 5.9.1 of this Code		
Capacity assignment, notification of results to users, communication of new post assignment capacities	• Storage Company	• No later than 3 pm of the next to last working day of the month preceding the performance of the requested service	• Publication of the aggregate assignments on the site and transmission of communication through Escomas with detailed results		
Transmission of new post assignment monthly schedule	• Shipper who requested access to the service	• No later than 4 pm of the last working day of the month preceding the performance of the requested service	• Via Escomas	• Yes (available on the Website of the Storage Company and Escomas)	• The Shipper sends its reservation containing the gas quantities, expressed in energy, that the Shipper expects to inject/withdraw for each day of the Month of performance of the Service

4A.3.4 Timeline for the access and performance of the weekly shipper balancing service



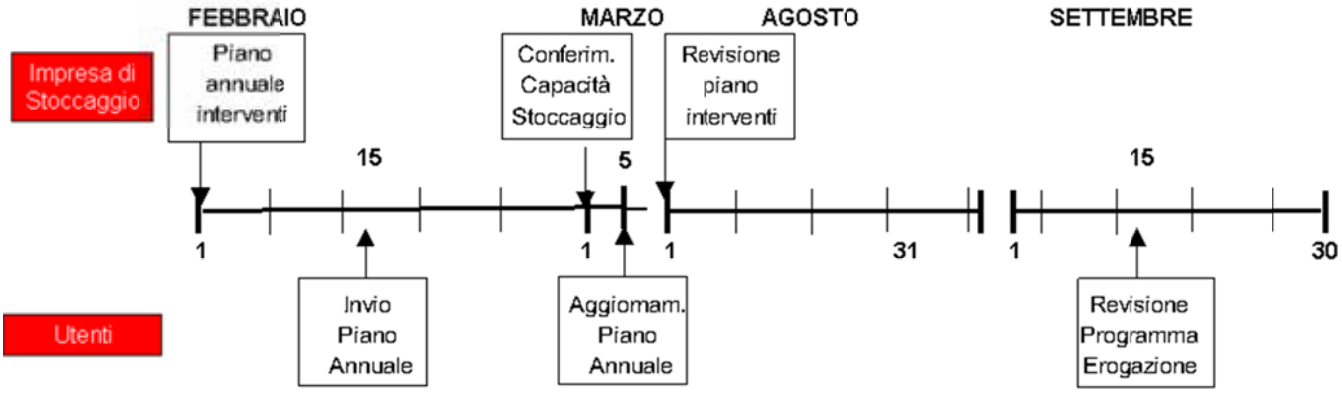
Request for access to the weekly shipper balancing service					
Activity	***By***	***When***	***How***	***Form***	***Relevant information and documents***
Request for access to the shipper balancing service	• Authorised user on Escomas	• No later than 4 pm on Thursday of the week preceding the performance of the requested service	• Transmission of Service Access Request through Escomas	• Yes downloadable after data are entered on Escomas (also available on the Website)	The capacity purchase bid must contain: • Adequate guarantee for the required purchase commitment • Financial soundness • Size of the capacities to be purchased • Purchase price for each type of capacity requested • If the Requesting User is not a registered User, (s)he must register on Escomas and demonstrate that (s)he meets all requirements for access to the storage services according to the time limits set out in par. 4.3.1.1. The capacity sale bid must contain: • Size of the capacities to be sold • Sale price for each type of capacity requested

Request for access to the weekly shipper balancing service					
Activity	***By***	***When***	***How***	***Form***	***Relevant information and documents***
Competitive procedure	• Storage Company	• No later than 5 pm on Thursday	• Assignment procedures specified in paragraph 5.9.1 of this Code		
Capacity assignment, notification of results to users, communication of new post assignment capacities	• Storage Company	• Once the competitive procedure is completed	• Publication of the aggregate assignments on the site and transmission of communication through Escomas with detailed results		
Transmission of new post assignment monthly schedule	• Shipper who requested access to the service	• No later than 6 pm of the working day after receipt of the new availabilities	• Via Escomas	• Yes (available on the Website of the Storage Company and Escomas)	• The Shipper sends its reservation containing the gas quantities, expressed in energy, that the Shipper expects to inject/withdraw for each day of the period of performance of the Service

It should be remembered that:
the term “week” means the period between a Monday and the following Sunday with the exception of the first and of the last week of the month, which are respectively reduced starting from the first day of the month and extended to the last day of the month.
in case of holidays, the deadlines are advanced to the first preceding working day.
To access the shipper balancing service, it is necessary to be registered and authorised to use the Escomas system.

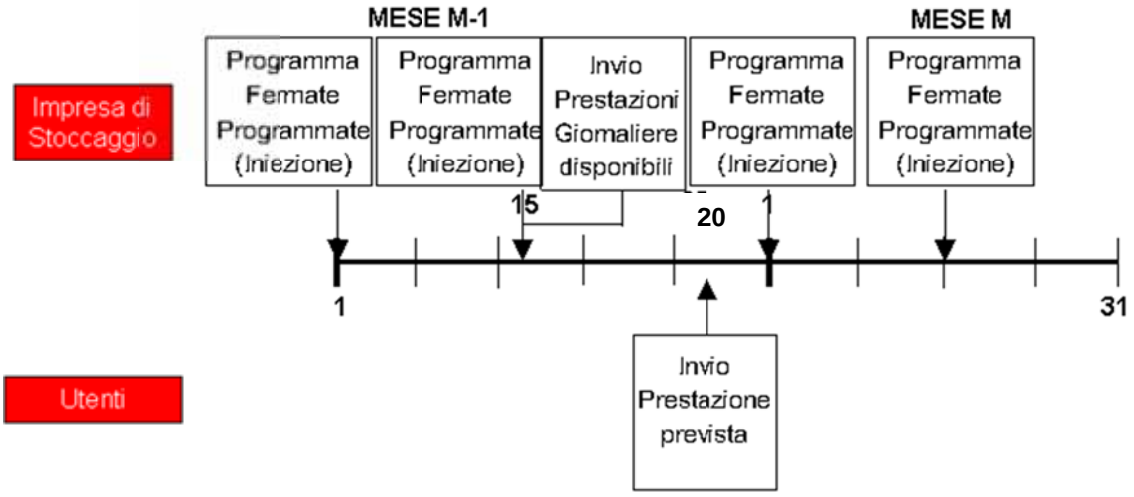
4A.4 INJECTION AND WITHDRAWAL RESERVATION AND COMMITMENTS (CHAPTER 6)

4A.4.1 Annual scheduling



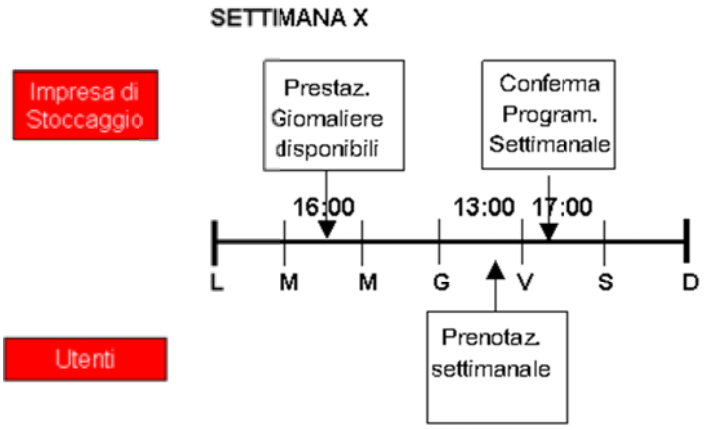
Annual Scheduling					
Activity	***By***	***When***	***How***	***Form***	***Relevant information and documents***
Annual Schedule of Maintenance Operations	• Storage Company	• No later than 1 February	• Website, Escomas		
Assignment of the Storage capacity	• Storage Company	• No later than 1 March	• Via Escomas		
Transmission of Annual Schedule	• Shipper	• No later than 5 March	• Via Escomas	• Yes (available on the Website of the Storage Company and Escomas)	• The Annual Schedule shall indicate: - The monthly Injection schedule; - The monthly Withdrawal schedule;
Half-yearly revision of Maintenance Operations schedule	• Storage Company	• No later than the First of August	• Website, Escomas		
Revision of the Withdrawal Schedule	• Shipper	• No later than 15 September	• Via Escomas	• Yes (available on the Website of the Storage Company and Escomas)	• The Shipper can send a revised Monthly Withdrawal Schedule, with the indication of the Withdrawal Flow Rate (PE)

4A.4.2 Monthly scheduling



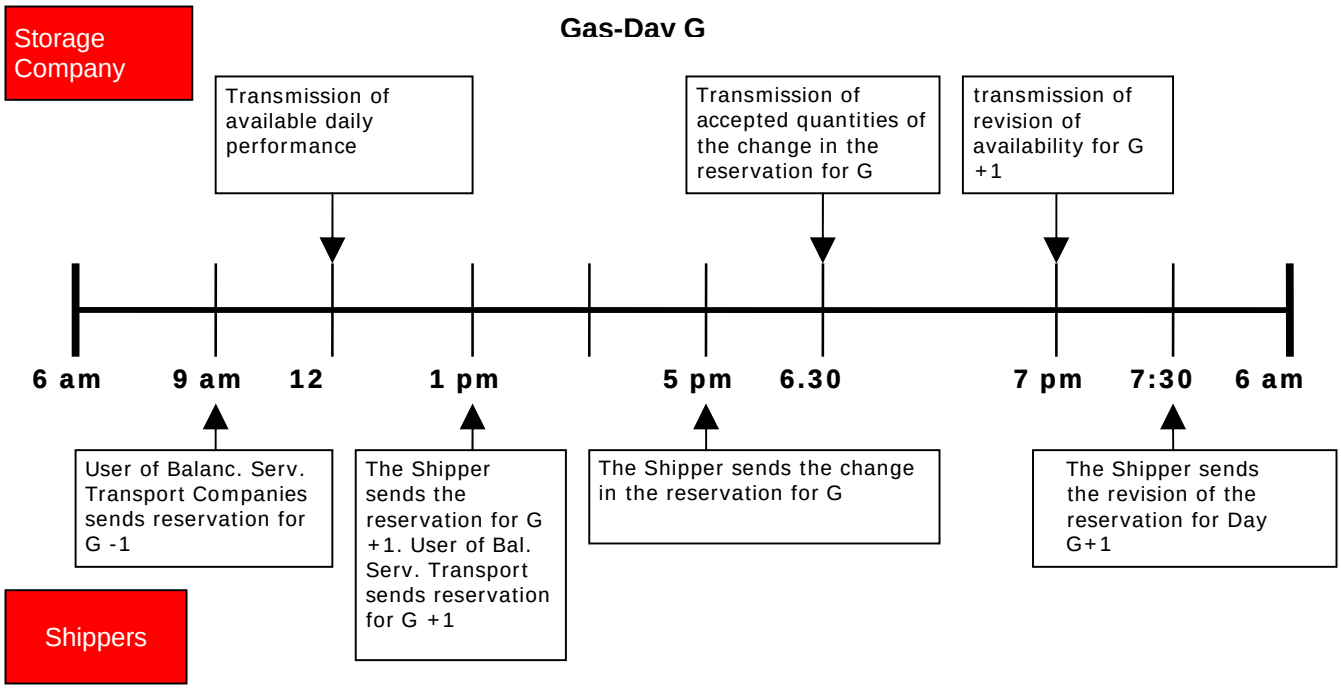
Monthly Scheduling					
Activity	***By***	***When***	***How***	***Form***	***Relevant information and documents***
Daily performance available for the following month	• Storage Company	• No later than the 15th day of the month preceding the performance of the service	• Via Escomas		
Transmission of Monthly schedule	• Shipper	• No later than 4 pm of the 20th day of the month preceding the performance	• Via Escomas	• Yes (available on the Website of the Storage Company and Escomas)	• The Shipper sends its reservation containing the gas quantities, expressed in energy, that the Shipper expects to inject/withdraw for each day of the Month of performance of the Service • The Shipper also provides the Storage Company with its estimate about the quantities of energy expected to be injected or withdrawn in the two following months.
Schedule Planned shut-downs	• Storage Company	• Once every two weeks	• Website • Escomas		• The Schedule of shut-downs of the two weeks

4A.4.3 Weekly scheduling



Weekly Scheduling					
Activity	***By***	***When***	***How***	***Form***	***Relevant information and documents***
Available daily performance	• Storage Company	• No later than 4 pm of each Tuesday	• Via Escomas		• Available daily performance (in GJ) for the following week
Weekly reservation	• Shipper	• No later than 1 pm of each Thursday	• Via Escomas	• Yes (available on the Website of the Storage Company and Escomas)	• The Shipper sends its reservation containing the gas quantities (in GJ), it expects to inject/withdraw for each day of the following Week for each Contract. • Reservations shall take into account any capacity reductions/interruptions planned in the weekly schedule of the storage company.
Confirm of the daily reservation	• Storage Company	• Tacit confirmation no later than 5 pm of the previous Thursday	Via Escomas		

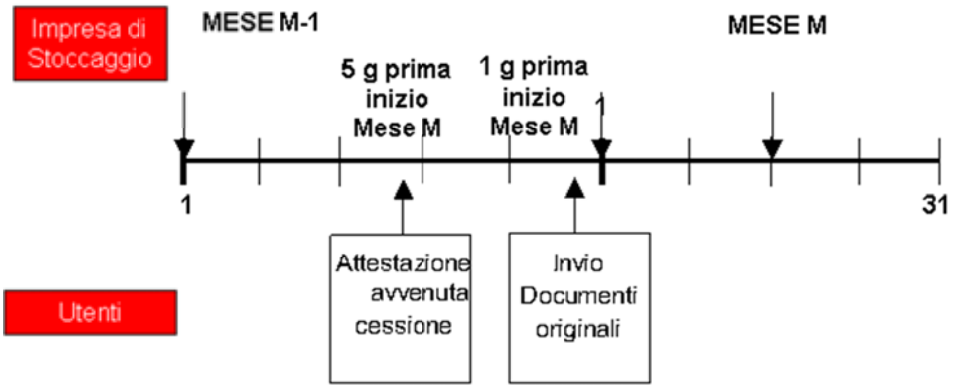
4A.4.4 Daily scheduling



Daily scheduling					
Activity	***By***	***When***	***How***	***Form***	***Relevant information and documents***
Revision of daily reservations	• User of Balancing Service for Transport Companies	No later than 9 am of every day	• Via Escomas	Yes (available on the Website of the Storage Company and Escomas)	• User of Balancing Service for Transport Companies sends the revision of the reservation (in GJ), for Day G-1.
Available daily performance	• Storage Company	• No later than 12 noon of every day	• Via Escomas		• Changes to available daily Performance (in GJ) for day G and G+1.
Daily reservations	• Shipper	• No later than 1 pm of day G	• Via Escomas	Yes (available on the Website of the Storage Company and Escomas)	• The Shipper (including the User of the Balancing Service for Transport Companies) sends the reservation (in GJ), for Day G+1, for each Contract. • The Shipper also ensures that the reservations match the transport schedule requested from the Major Transport Company.
Revision of daily reservations	• Shipper	No later than 5 pm of every day	• Via Escomas	Yes (available on the Website of the Storage Company and Escomas)	The Shipper sends the revision to the reservation (in GJ), for day G
Confirmation of the daily reservation	• Storage Company	• Confirmation no later than 6.30 pm of every day.	• Via Escomas		The Storage Company sends the accepted quantities of the reservation (in GJ), for Day G
Available daily performance	• Storage Company	• No later than 7 pm of every day	• Via Escomas		The Storage Company sends the revision to the availability (in GJ), for Day G+1
Daily reservations	• Shipper	• No later than 7.30 pm of every day	• Via Escomas	Yes (available on the Website of the Storage Company and Escomas)	The Shipper sends the revision to the reservation (in GJ), for day G+1

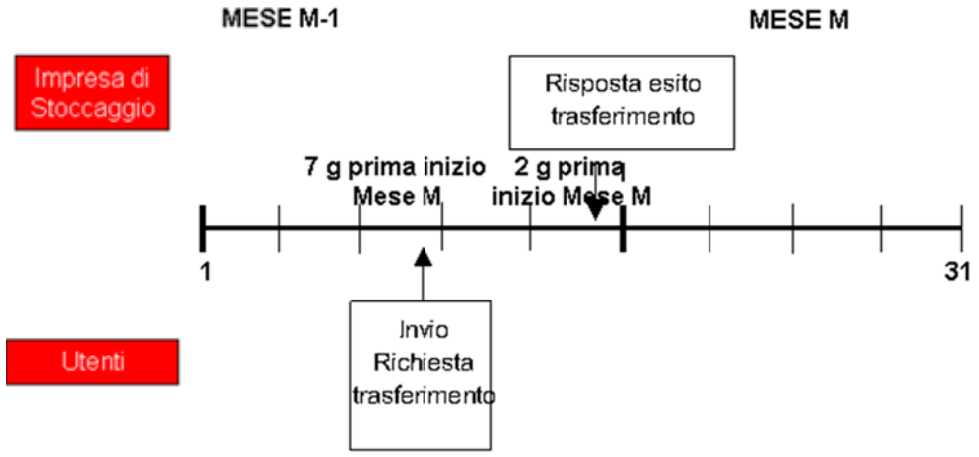
4A.5 CAPACITY AND GAS TRANSACTIONS (CHAPTER 7)

4A.5.1 Capacity and gas sales and exchanges



Request for capacity and gas sale and exchange					
Activity	***By***	***When***	***How***	***Form***	***Relevant information and documents***
Transmission of request for sale and/or exchange	• Involved shippers	• No later than 5 days from the starting date of the month when the sale enters into force	• via Escomas	• Yes (available on the Website and Escomas)	• The Storage Capacities and/or the Performance and/or the quantities of gas of the transaction • The involved Parties • The starting date and the duration of the transaction • The Shipper to be invoiced for the transaction management costs, if from the selling Shipper
Transmission of the original documentation of the sale and/or exchange request	• Shipper	• No later than 1 day from the starting date of the month when the sale enters into force	• Original by certified mail		

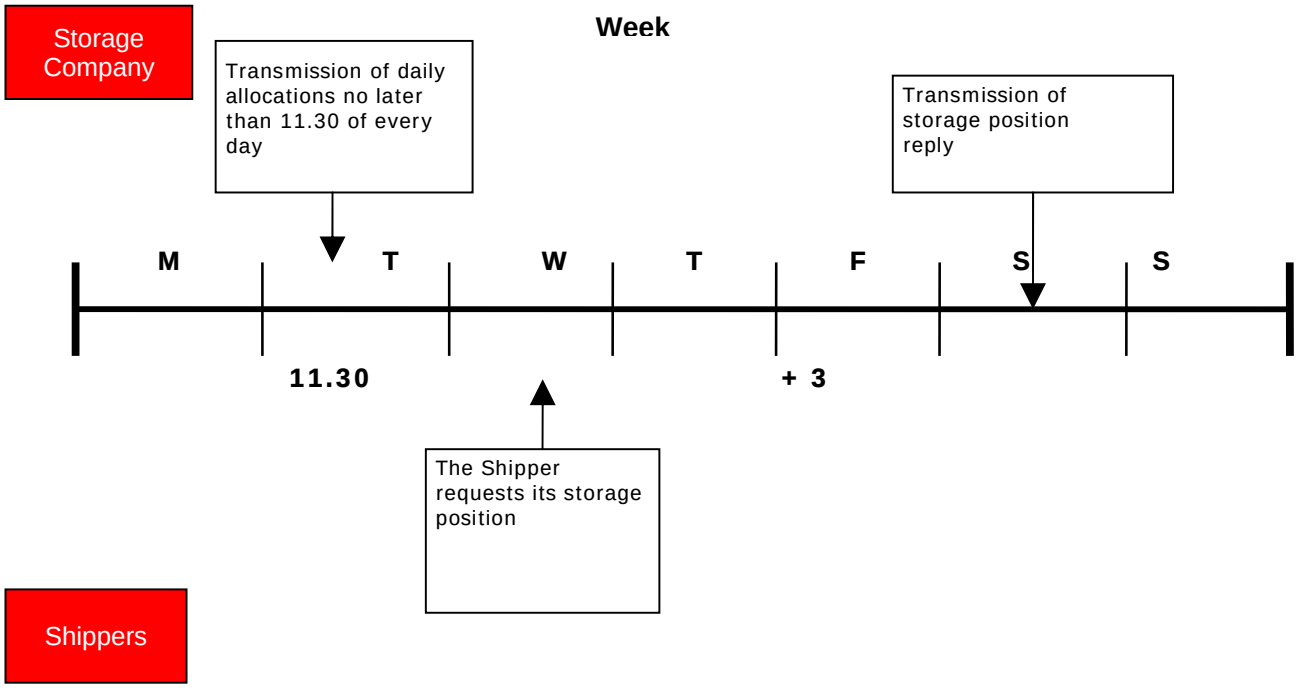
4A.5.2 Storage capacity transfers



Storage capacity transfers					
Activity	***By***	***When***	***How***	***Form***	***Relevant information and documents***
Transmission of transfer request	• Party taking over	• no later than 7 working days before the end of the month preceding the start of the transfer	• Advance transmission via Escomas, transmission of originals by certified mail	• Yes (available on the Website and Escomas)	• The Transfer request shall contain the following information: - the Storage Capacities intended for the obligations in accordance with the supply; - the data needed to quantify the aforesaid capacity on the basis of the procedures in force; - the declaration in lieu of affidavit attesting the take-over of the supply and the supply relationship between requesting User and the supplier that is taking over, if the supplier taking over on the end customer is not the requesting User; - the starting date of the transfer; - If the party taking over is not a User, it must qualify on Escomas and demonstrate that it meets all requirements for access to the storage services according to the time limits set out in par. 4.3.1.1.
Transfer outcome reply	• The Storage Company	• no later than 2 working days before the end of the month preceding the start of the transfer	• Via Escomas		- Results of the transfer. - If the party taking over is not a Shipper, the Storage Company will simultaneously send the Storage Contract prepared according to the standard available on Escomas with the indication of the Assigned Capacities. The Contract is effective starting from the date of effectiveness of the transfer

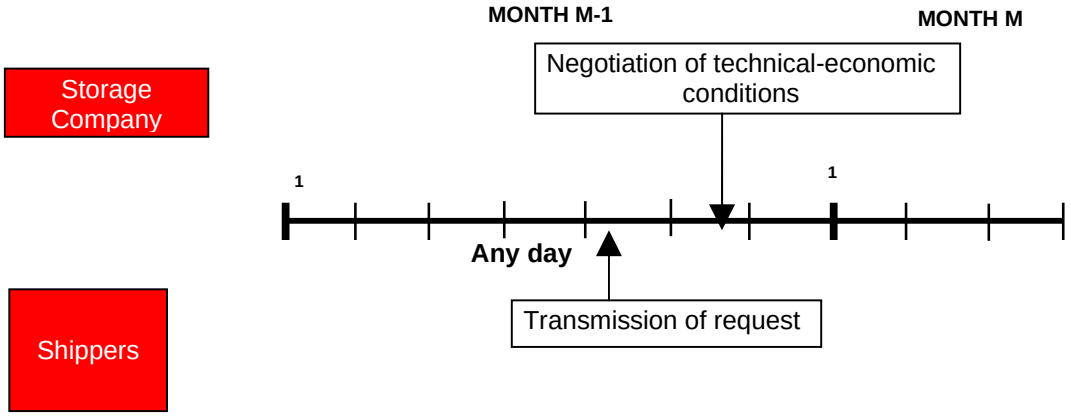
4A.6 ALLOCATIONS AND ADJUSTMENTS (CHAPTER 8)

4A.6.1 Daily allocations and storage position request



Allocations					
Activity	***By***	***When***	***How***	***Form***	***Relevant information and documents***
Publication of the daily allocations on Escomas	• Storage Company	• no later than 11.30 of every day	• Via Escomas		
Storage position request	• Shipper	• Any day	• Via Escomas		
Request outcome reply	• The Storage Company	• no later than 3 working days from receipt of the request	• Via Escomas		

4A.7 SPECIAL SERVICES (CHAPTER 3)



Request for access to a negotiated service					
Activity	***By***	***When***	***How***	***Form***	***Relevant information and documents***
Transmission of the request	• Shipper	• At any time of the thermal year	• Advance transmission via email and/or fax, transmission of originals by certified mail	• No	• The request shall contain the technical characteristics and the duration of the service • If the Requesting User is not a registered User, (s)he must register on Escomas and demonstrate that (s)he meets all requirements for access to the storage services according to the time limits set out in par. 4.3.1.1.
Negotiation of the technical and economic conditions of the requested service	• Storage Company and Shipper				
Transmission to the Authority for approval of the tariff proposal	• Storage Company				

CHAPTER 5

ASSIGNMENT OF STORAGE CAPACITY

5.1 USER QUALIFICATION AND REGISTRATION

Access to the storage services offered by the Storage Company is allowed in an impartial and neutral manner and at equal conditions for all parties that fulfil the requirements described in this chapter.

5.2 ACCESS REQUIREMENTS

Since the storage capacities are assigned according to the priority criteria defined by the Authority in the Resolution, the access requirements and the methods for determining the maximum assignable capacities are differentiated by type of service and by type of end customer served by the Requesting User.
The assignment priorities for mandatory services are as follows:

- Strategic storage service
- Operational balancing service for transport companies
- Hydrocarbon storage service;
- Modulation service, offered as a priority for fulfilling the obligations to end customers per Article 18, Paragraphs 2 and 3 of Italian Legislative Decree no. 164/00;
- Modulation service for additional modulation needs;
- Shipper Balancing Service.

Parties requesting access (hereafter, “Requesting Users”) to one or more of the storage services shall attest the requirements discussed below, by submitting a declaration in lieu of affidavit.

5.2.1 General requirements

Users requesting access to one or more storage services must attest, within the terms and with the procedures established below, that they fulfil the requirements prescribed herein.

The Storage Company will not stipulate Contracts for the performance of the storage services with the Requesting Users that, at the date of submission of the Assignment Request, have not completed the payments due by virtue of the Storage Contracts relating to the current Thermal Year or relating to previous Thermal Years, for invoiced amounts already due and exceeding the value of the guarantee issued to cover the obligations deriving from the aforesaid contracts.

The Storage Company shall promptly notify the Authority and the MSE of this circumstance for the adoption of the pertinent measures.

The Storage Company shall not stipulate Contracts for the performance of storage services with Requesting Users that are not at the same time also Users of the Transport Service per the Network Code of the major transport company.

The loss of even a single one of the requirements for access to the storage system constitutes grounds for early termination of the Contract as provided in Chapter 17.

5.2.1.1. Guarantees

5.2.1.1.1. Guarantees covering the obligations deriving from the Assignment (except the assignment for the shipper balancing service)

Upon submitting the Access Request, both for the mandatory services and for special services, the Requesting User shall provide evidence of possession of a credit standing of proven reliability, or, alternatively, it shall be able to provide adequate financial guarantees, in order to safeguard the other Shippers and the Storage Company if the Contract is not executed, or it is executed for lower capacities than those assigned.

The assessment of the Requesting User's financial soundness is carried out by the Storage Company according to the following criteria:

a) Without need for the additional guarantees per the following points, it is deemed sufficient to possess a credit rating, assigned by leading international bodies, with reference to medium-long term debt, of at least:

- Baa2 if assigned by Moody's Investor Services; or,
- BBB if assigned by Standard & Poor's Corporation.

The Requesting User shall provide appropriate certification, issued by one of the aforementioned bodies, proving the assigned level of Rating, and shall communicate any changes that may have taken place afterwards.

b) If the criterion per point a) is met by the company that controls the Requesting User, or if the controlling party is a public agency, the requesting user may submit to the Storage Company a letter of guarantee (a Parent Company Guarantee) issued by the parent company in favour of the Storage Company that expresses the commitment - which can be activated "at first request" by the Storage Company - to fulfil exactly and punctually the obligations deriving from the Assignment assumed by the Shipper to the Storage Company;

c) If the criteria per points a) and b) above are not met, the Requesting User, to cover the obligations deriving from the Assignment of the Hydrocarbon Service and of the Balancing Service for Transport Companies, shall cause one or more leading banks to issue, in favour of the Storage Company, a bank guarantee and/or insurance policy, issued by parties having the same credit standing as those mentioned in paragraph 5.2.1.1.1, both abstract, autonomous and enforceable "at first request" for an amount equal to:

$$(1)\ \text{Amount} = ((f_s + US_1 + US_2 + CM^S) \times \Sigma RS_{i.} + f_{pi} \times \Sigma RCI_i + f_{pe} \times \Sigma \sigma_i \times RCE_i + 2 \times CVS \times \Sigma RS_i) \times 25\%$$

Where:

f_s, f_{pi}, f_{pe}, σ_i, CVS are the prices approved by the Authority;

US_1 is the tariff component to cover equalisation imbalances, expressed in euro/gigajoule per year;

US_2 is the tariff component to cover costs deriving from the compensatory contribution for the failure to make alternative use of the territory, expressed in euro/gigajoule per year;

RS_i is the Space requested by the Requesting User for the i-th service (including S_{STR});
RCI_i is the Injection Performance requested by the Requesting User for the i-th service;
RCE_i is the Withdrawal Performance requested by the Requesting User for the i-th service;
CM^S is the transitional measurement price.

Limited to the assignment of the Modulation Service by competitive procedure, if the criteria per points a) and b) above are not met, the Requesting User, to cover the obligations deriving from the Assignment of the Service, shall cause one or more leading banks to issue, in favour of the Storage Company, a bank guarantee and/or insurance policy, issued by parties having the same credit standing as those mentioned in paragraph 5.2.1.1.1, both abstract, autonomous and enforceable "at first request" for an amount specified in the assignment procedure published on the Website of the Storage Company and otherwise not exceeding 25% of the total economic offer.

d) Without prejudice to the retention right per Article 17.4.1, to guarantee exact compliance with the obligations assumed by the Shipper, the gas owned by the Shipper and located in Storage is pledged as collateral, after execution of an agreement, upon stipulation of the contract for the performance of one of the storage services, providing for pledging said gas (hereafter "Guarantee Gas") and the assignment of an appointment to Edison Stoccaggio for the sale on behalf of the shipper of all or part of the Guarantee Gas, in case of breach of the Shipper in accordance with Chapters 16 and 17 of the Storage Code and of insufficiency of the financial guarantees already provided, in order to satisfy its credit with the revenues from the sale.

   For the purposes of establishing the pledge in favour of Edison Stoccaggio S.p.A., the value of the Guarantee Gas under this paragraph shall be equal to a reference price amounting to 100% of the last value of the component per Article 6 of the TIVG approved with resolution ARG/GAS 64/09 as amended.

   The portion of gas not enforced as collateral in accordance with the above paragraph may be returned to the full availability of the Shipper, along with the revenue of the sale exceeding the receivable not covered by the financial guarantees.

The Parties expressly agree that, while failure to submit the guarantee per the present paragraph shall not constitute grounds for refusing access to mandatory services, it shall obligate the Requesting User to pay to the Storage Company an amount equal to 25% of the capacity assigned in accordance with paragraph 5.7 below.

As an additional requirement for access, if the Shipper is in breach with respect to its payment obligations, the Storage Company will require an additional bank guarantee or insurance policy (Supplemental Guarantee), issued by parties having the same credit standing as those mentioned in paragraph 5.2.1.1.1, both abstract, autonomous and enforceable "at first request", for a value equal to the amounts already past due which the Shipper has not paid and which are not already covered by bank guarantee.

The validity of the Access Request for the Storage Service shall be subordinated to the submission of the Supplemental Guarantee.

5.2.1.1.2. Guarantees covering the obligations deriving from the performance of the Storage Service (except the performance of the shipper balancing service)

To cover the performance of the Storage Service, the Shipper shall submit adequate guarantees in relation to compliance with all obligations assumed by the Shipper by virtue of the Storage Contract.

For mandatory Services, no later than the 5th day of April or, if it falls on a Saturday or holiday, the first subsequent working day, the Shipper shall submit:

a) Declaration in lieu of affidavit containing the confirmation of possession of the Rating per paragraph 5.2.1.1.1 a) or certification, issued by one of the bodies per paragraph 5.2.1.1.1 a), proving the new Rating per the same paragraph if any changes have occurred with respect to the date of transmission of the Request for Access;
b) Declaration in lieu of affidavit containing confirmation of possession of the Rating per paragraph 5.2.1.1.1 b) and an addendum to the Parent Company Guarantee or a new letter of guarantee issued by the parent company to cover the payment obligations assumed by the Shipper with respect to the Storage Company;

c) If the criteria per subparagraph 5.2.1.1.1. letter a) and b) are not met, addendum letter or new bank guarantee and/or insurance policy issued by parties having the same credit standing as those mentioned in paragraph 5.2.1.1.1, both abstract, autonomous and enforceable "at first request" for an amount equal to:

(1) $\text{Amount} = (((fs + US1 + US2 + CMS) \times \Sigma S_{i.} + (f_{pi} + CPu) \times \Sigma CI_i + (f_{pe} + CPe) \times \Sigma \sigma_i \times CE_i + 2 \times CVS \times \Sigma S_i + EE \times \Sigma S_i / S_{totEE}) \times (100+IVA)\% \times 33\%$

Where:

S_i is the Space assigned to the Shipper for the i-th service;

US_1 is the tariff component to cover equalisation imbalances, expressed in euro/gigajoule per year;

US_2 is the tariff component to cover costs deriving from the compensatory contribution for the failure to make alternative use of the territory, expressed in euro/gigajoule per year;

CPe is the unit capacity price for transport on the national pipeline network, relating to the assignments in the point of entry e of the national pipeline network, expressed in euro/year/cubic metre/day reported in euro/year/GJ/day and multiplied times the maximum factor for adjustment of the withdrawal capacity;

CPu is the unit capacity price for transport on the national pipeline network, relating to the assignments in the point of exit u and of the national pipeline network, expressed in euro/year/cubic metre/day reported in euro/year/GJ/day and multiplied times the maximum factor for adjustment of the injection capacity;

CI_i is the Injection Performance assigned to the Shipper for the i-th service;

CE_i is the Withdrawal Performance assigned to the Shipper for the i-th service;

f_s, f_{pi}, f_{pe}, σ_i, CVS are the prices approved by the Authority and indicated in par. 8.10;

EE is the total cost of the electricity incurred by the Storage Company in the previous calendar year and published on the Website;

S_{totEE} is the total space assigned by the Storage Company excluding the space assigned for the operational balancing of the transport network;

VAT is the VAT rate to be applied to the invoices per Chapter 16 in force at the time of execution.

For the purposes of the assignment for the operational Balancing of the transport network in formula (1), the term EE shall be set to zero.

d) Without prejudice to the retention right per Article 17.4.1, to guarantee exact compliance with the obligations assumed by the Shipper, the gas owned by the Shipper and located in Storage is pledged as collateral, after execution of an agreement, upon stipulation of the contract for the performance of one of the storage services, providing for pledging said gas (hereafter "Guarantee Gas") and the assignment of an appointment to Edison Stoccaggio for the sale on behalf of the shipper of all or part of the Guarantee Gas, in case of breach of the Shipper in accordance with Chapters 16 and 17 of the Storage Code and of insufficiency of the financial guarantees already provided, in order to satisfy its credit with the revenues from the sale.

For the purposes of establishing the pledge in favour of Edison Stoccaggio S.p.A., the value of the Guarantee Gas under this paragraph shall be equal to a reference price amounting to 100% of the last value of the component per Article 6 of the TIVG approved with resolution ARG/GAS 64/09 as amended.

The portion of gas not enforced as collateral in accordance with the above paragraph may be returned to the full availability of the Shipper, along with the revenue of the sale exceeding the receivable not covered by the financial guarantees.

For all other storage Services, the financial guarantees shall be provided upon execution of the Contract and they shall be requested according to the criteria per paragraph 5.2.1.1.1 and for an amount equal to 33% of the total price due for the performance of the service, only if the exposure deriving from the contractual commitments exceeds Euro 50,000 (fifty thousand).
In this case, Execution of the contract shall be subordinated to the submission of the aforesaid guarantees.
As a result of partial or total enforcement of the surety, the Shipper shall immediately restore it to the initially provided amount.

5.2.1.1.3. Guarantees covering the obligations deriving from the assignment of the capacities and from performance of The Shipper Balancing Service.

Upon submitting the Request for Access to the Shipper Balancing Service, the Requesting User shall provide evidence of possession of a credit standing of proven reliability, or, alternatively, it shall be able to provide adequate financial guarantees, in order to safeguard the other Shippers and the Storage Company in case of any breaches of the Contract.

The assessment of the Requesting User's financial soundness is carried out by the Storage Company according to the following criteria:

a) Without need for the additional guarantees per the following points, it is deemed sufficient to possess a credit rating, assigned by leading international bodies, with reference to medium-long term debt, of at least:

   - Baa2 if assigned by Moody's Investor Services; or,
   - BBB if assigned by Standard & Poor's Corporation.

   The Requesting User shall provide appropriate certification, issued by one of the aforementioned bodies, proving the assigned level of Rating, and shall communicate any changes that may have taken place afterwards.

   If the Requesting User has already submitted the aforesaid certification to the Storage Company for access to the Modulation Service, and this level has not decreased compared to the minimum level required, then the Requesting User shall not be obligated to submit the aforesaid certification in the Request for Access to the Shipper Balancing Service.

b) If the criterion per point a) is met by the company that controls the Requesting User, or if the controlling party is a public agency, the requesting user may submit to the Storage Company a letter of guarantee (a Parent Company Guarantee) issued by the parent company in favour of the Storage Company - which can be activated "at first request" by the Storage Company - for an amount at least equal to:

   (1) $\text{Amount} = 0.5 \times (((P_{SBUk} \times RS_{BUk.} + \max (P_{IBU,k} \times RCI_{BUk,1°sessione}; P_{IBU,k} \times RCI_{BUk,\ 2°sessione}) + \max (P_{EBU,k} \times RCE_{BUk,1°sessione}\ ;\ P_{EBU,k} \times RCE_{BUk,\ 2°sessione}))$

Where:

P_{SBUk} is the unit purchase price offered for the k-th request for Space for the Shipper Balancing Service;
RS_{BUk} is the k-th request for Space by the Requesting User for the Shipper Balancing Service;
P_{SBUk} is the purchase price offered by the Requesting User for the k-th request for Injection Capacity for the Shipper Balancing Service;
RCI_{BUk} is the k-th request for Injection capacity by the Requesting User for the Shipper Balancing Service;
$P_{EBU,k}$ is the purchase price offered by the Requesting User for the k-th request for Withdrawal Capacity for the Shipper Balancing Service;
RCE_{BUk} is the k-th request for Injection Capacity by the Requesting User for the Shipper Balancing Service.

c) Lastly, if the criteria per points a) and b) above are not met, the Requesting User, to cover the obligations deriving from the Assignment, shall cause one or more leading banks to issue, in favour of the Storage Company, a bank guarantee and/or insurance policy, issued by parties having the same credit standing as those mentioned in paragraph 5.2.1.1.1, both abstract, autonomous and enforceable "at first request" for an amount equal to:

(2) Amount = 0.5 x ((P_{SBUk} x $RS_{BUk.}$ + max ($P_{IBU,k}$ x $RCI_{BUk,1°sessione;}$ $P_{IBU,k}$ x $RCI_{BUk,\ 2°sessione}$) + max ($P_{EBU,k}$ x $RCE_{BUk,1°sessione}$; $P_{EBU,k}$ x $RCE_{BUk,\ 2°sessione}$)

Where:
P_{SBUk} is the unit purchase price offered for the k-th request for Space for the Shipper Balancing Service;
RS_{BUk} is the k-th request for Space by the Requesting User for the Shipper Balancing Service;
$P_{IBU,k}$ is the purchase price offered by the Requesting User for the k-th request for Injection Capacity for the V Balancing Service;
RCI_{BUk} is the k-th request for Injection capacity by the Requesting User for the Shipper Balancing Service;
$P_{EBU,k}$ is the purchase price offered by the Requesting User for the k-th request for Withdrawal Capacity for the Shipper Balancing Service;
RCE_{BUk} is the k-th request for Injection Capacity by the Requesting User for the Shipper Balancing Service.

d) Without prejudice to the retention right per Article 17.4.1, to guarantee exact compliance with the obligations assumed by the

Shipper, the gas owned by the Shipper and located in Storage is pledged as collateral, after execution of an agreement, upon stipulation of the contract for the performance of one of the storage services, providing for pledging said gas (hereafter "Guarantee Gas") and the assignment of an appointment to Edison Stoccaggio for the sale on behalf of the shipper of all or part of the Guarantee Gas, in case of breach of the Shipper in accordance with Chapters 16 and 17 of the Storage Code and of insufficiency of the financial guarantees already provided, in order to satisfy its credit with the revenues from the sale.

For the purposes of establishing the pledge in favour of Edison Stoccaggio S.p.A., the value of the Guarantee Gas under this paragraph shall be equal to a reference price amounting to 100% of the last value of the component per Article 6 of the TIVG approved with resolution ARG/GAS 64/09 as amended.

The portion of gas not enforced as collateral in accordance with the above paragraph may be returned to the full availability of the Shipper, along with the revenue of the sale exceeding the receivable not covered by the financial guarantees.

The guarantees specified in this paragraph shall be valid from the date of submission of the Request for Access to the Shipper Balancing Service until their return to the Requesting User by the Storage Company and at least until 31 December after the end of the Thermal Year to which the Request refers.

The Requesting User may submit, simultaneously with the Request for Access to the weekly and/or monthly Shipper Balancing Service, a revision to the guarantee already submitted previously. Said revision may pertain both to the amount and the duration of the guarantee.

The guarantees per the present paragraph shall, in any case, be delivered in original form to the Storage Company within the terms indicated above.

5.2.2 Requirements for access to the Hydrocarbon Storage Service

For the purposes of access to the Hydrocarbon Storage Service, the Requesting User shall fill out the related Assignment Request and send it to Edison Stoccaggio S.p.A. as provided in paragraph 5.5 and attach a declaration in lieu of affidavit attesting the maximum quantities

authorised by the MSE for the thermal year for which the Request for Access is being sent.

5.2.3 Requirements for access to the Operational Balancing Storage Service for transport companies

For the purposes of access to the operational balancing Storage Service for transport companies, the Requesting User shall be a transport company that manages part of the RNG.

5.2.4 Requirements for access to the Modulation Storage Service

For the purposes of access to the Modulation Service, the Requesting User shall meet the following requirements:
- right, title and interest in a contract for the transport services with effect on the starting date of the storage Thermal Year;
- payment of all amounts, invoiced and past due at the date of the request,
globally exceeding the value of the guarantees issued to cover the obligations deriving from contracts previously executed with the Storage Company;
- right, title and interest in contracts for the direct or indirect supply of customers per Article 12 Paragraph 7 letter a) of Italian Legislative Decree no. 164/2000 as amended by the Italian Legislative Decree no. 93 of 1 June 2011, only for the parties that intent to benefit from the provisions per Article 2 Paragraph 3 of the Ministerial Decree of 19 February 2014;
- completed delivery, according to the procedures communicated before the start of the competitive assignment procedures, of the documentation attesting possession of the “minimum rating” covering the obligations deriving from the assignment as prescribed in paragraph 5.2.1.1.1, or of a letter of guarantee and/or bank guarantee and/or insurance policy to cover the obligations deriving from the assignment, whose amount shall be consistent with the provisions of the Storage Company and published on its Website before the start of the competitive assignment procedures.
The Requesting User shall fill out the related Request for Assignment per Par. 5.3 of Resol. 85/2014 and send it to the Storage Company according to the procedures communicated by it, through its own Website, before the start of the competitive assignment procedures and, insofar as it is applicable, by the provisions of paragraph 5.5. and attach a declaration in lieu of affidavit which attests the validity of the powers of representation in the assignment procedure.

5.2.5 Requirements for access to the Shipper Balancing Service

To use the Shipper Balancing Service, the User must declare that it has requested, or it must undertake to request a transport capacity from the Major Transport Company. This requirement shall be understood to be no longer met if for any reason it no longer has access to said capacity in the period of validity of the Contract.

The Users requesting access to the Shipper Balancing Service shall fill out the form for the Request for Access available on Escomas and at the Website of the Storage Company in case of malfunction of the Electronic System and send it to it as provided in paragraph 5.9.1., attaching the required documentation, per annex 4A.3.2.

5.3 THE STORAGE CONTRACT

The Storage Contract is the document through which the contracting parties, i.e. the Storage Contract and the Shippers, define the specific elements of the storage service requested including its specific elements and expressly and fully accept the Storage Code in force at the date of execution of the contract and every amendment and addition and the prices applied to the service.

The Storage Company shall not sign any Contracts if the request is not valid in accordance with paragraph 5.6.

The Storage Contract has a period of validity of no more than one year.

The Storage Contract is made available through Escomas to the Requesting User at the same time as communication of the results of the Assignment; the Storage Contract shall be signed by the Parties no later than 7 working days from communication of the results of the Assignment.
In the case, instead, of assignments of storage capacity in the course of the Thermal Year or for a shorter time of validity than a Thermal Year, the Contract must be signed by the Parties at least 1 day before the start of the service.

In accordance with paragraph 17.4.1, if the Shipper does not provide the Storage Company with the financial guarantees according to the

procedures prescribed in paragraph 5.2.1.1.2, the Storage Company shall be entitled to terminate the Contract early.

Excepting the transfers/sales of Storage capacity regulated by this Storage Code under chapter 7 “Capacity Transactions” and taking effect starting from 1 April of each Thermal Year, the Requesting User who does not sign the Storage Contract or signs it within the aforesaid date with smaller capacity commitments than the capacities assigned according to the procedure per paragraph 5.7 shall be charged a penalty of 25% of the value of the unsubscribed capacity commitments.

5.4 LOSS OF REQUIREMENTS

The loss of one or more of the requirements for access to the System per paragraph 5.2 above constitutes grounds for early termination of the Storage Contract, in accordance with the terms and conditions specified in paragraph 17.41 of the Chapter “Responsibilities of the Parties”.

5.5 REQUEST FOR ACCESS (WITH THE EXCLUSION OF THE REQUESTS FOR THE SHIPPER BALANCING SERVICE)

Each Requesting User, after registering on the Electronic System as provided by Par. 4.3.1.1 if (s)he is not already a registered User, shall make available on the system and send in original form to the Storage Company:

- according to the procedures and times published by the Storage Company on its Website before the start of the competitive assignment procedures, the Request for Access to the modulation storage services for the following Thermal Year as specified in the aforesaid procedures;
- no later than 5 February of each year for the other mandatory services

The Request for Access shall be submitted in accordance with the procedures and times prescribed in paragraph 4A.2 of the Annex “Table of Times and Methods of Information Coordination” or, if not specified, in accordance with the assignment procedure published on the Website of the Storage Company before the start of the competitive assignment procedures.

To the Request for Access, the Requesting User must attach the documentation relating to fulfilment of all requirements for access per paragraph 5.2 of this chapter1.

The Request for Access explicitly contains the commitment to sign the Storage Contract.

No later than 1 February of each year, the Storage Company publishes on its own Website and on Escomas, together with the available Capacities, the list of documentation the Requesting User must submit for the Request for Access, broken down by type of service, as well as the forms and a reminder of the deadlines of the assignment cycle.

The information contained in the Requests for Access and the results of the Assignment cycle shall be sent by the Storage Company to the Authority.

5.6 INVALID REQUEST (WITH THE EXCLUSION OF THE REQUESTS FOR THE SHIPPER BALANCING SERVICE)

The requests shall not be deemed valid by the Storage Company if:

a) The requesting parties at the date of subscription, have not completed the payments due in relation to the existing Storage Contracts, for invoiced amounts already due, exceeding the value of the bank guarantee issued to cover the obligations deriving from the aforesaid existing Storage Contracts;
b) They do not contain the documentation required per paragraph 5.2 of this chapter;
c) They are submitted by a party who does not fulfil one of the requirements for access per paragraph 5.2 of this chapter at the date of submission of the request for access;
d) They are not formulated in accordance with the provisions of the assignment procedure, described below;
e) The declaration of right, title and interest in a contract for the transport service is not provided by the requesting user.

[1] The forms for the declaration per subparagraphs 5.2.1.1.1 and 5.2.1.1.2 and those for the declaration of validity of the powers of representation are available on Escomas and at the Website of the Storage Company, if the system is not available.

5.7 REQUEST FOR ACCESS TO THE SHIPPER BALANCING SERVICE

5.7.1 Request of assignment of capacity for the Shipper Balancing Service

Each Requesting User, after registering on Escomas as provided by Par. 4.3.1.1 if it is not already a registered User, shall make available on the system and send in original form to the Storage Company no later than:

- 2 pm of the next to last working day of the month, its Request for Access to the monthly Shipper Balancing Service for the following month, according to the procedures prescribed in paragraph 4A.3.2.
- 4 pm of the next to last working day of the preceding week its own Request for Access to the weekly Shipper Balancing Service for the following week, according to the procedures prescribed in paragraph 4A.3.3.

In addition to the Request for Access, the Requesting User shall provide the documentation pertaining to fulfilment of all requirements for access per paragraph 5.2.1.1.3 (adequate financial soundness and guarantees) and 5.2.6 (availability of transport capacity) of this chapter, and documentation proving payment of all amounts invoiced and past due at the date of the Request for Access to the Shipper Balancing Service, exceeding the value of the letter of guarantee or bank guarantee issued to cover the obligations deriving from contracts previously stipulated with the Storage Company.

If the Requesting User requires access to the Storage Services for the first time, it shall also communicate to the Storage Company the names of its own users for their authorisation to access the Portal, in accordance with paragraph 4.3 of this Code.
The Request for Access explicitly contains the commitment to sign the Shipper Balancing Contract.
Once the assignment procedure is completed, the Storage Company makes available on Escomas to interested Shippers the communication attesting the assignment of capacities per paragraph 5.9.1 below, and the new availabilities for the month of the assignment.

The Storage Company publishes on its own Website as provided by article 6.10 of resolution ARG/gas 165/09, and thus no later than the third working day after the closure of the auction procedure, the outcome

of the auction in terms of Storage Capacities offered, requested and assigned for the Shipper Balancing Service as well as the related assignment prices. No later than the same day, the Storage Company communicates to the Authority the detailed results of the competitive procedure.

In the Request for Assignment for the Shipper Balancing Service, the Requesting User shall indicate the individual Capacities on a continuous basis it intends to acquire in the first assignment session - per paragraph 5.9.1 of this chapter - and the corresponding maximum purchase price.
In addition, the Requesting User can indicate whether it intends to participate in the assignment of the interruptible Capacities in the second assignment session - per paragraph 5.9.1 below - for the portion of Capacity not satisfied in the first session. For this purpose, it shall in any case indicate a corresponding maximum price for participation in the second session.
Participation in the second session is possible only in case of unmet demand in the first assignment session.

If the User requesting access to the Shipper Balancing Service, at the time of the request for access to the aforesaid service, has not yet paid the amount per paragraph 5.7.2. in relation to a Thermal Year, shall pay to the Storage Company for the same Thermal Year, an amount of € 1,000 as the charge for managing the Service.
This charge shall be paid only once for each Thermal Year and also if the requested capacities are not assigned.

The Contract for the Shipper Balancing Service shall be deemed executed with the aforesaid communication by the Storage Company. The date on which the aforesaid communication is sent represents the date of stipulation of the Contract.

In any case, the Contract shall be effective from the first day of the month or of the week to which the Request refers.

5.7.2 Offers to sell capacity for the Shipper Balancing Service

The present paragraph establishes the rules for offers to sell capacity by the Users of the transport service for the purposes of assignment of capacities for the Shipper Balancing Service.

Each Requesting User, after registering on Escomas as provided by Par. 4.3.1.1 if it is not already a registered User, shall make available on

the system and send in original form to the Storage Company no later than:

- 2 pm of the next to last working day of the month, its Request for Access to the monthly Shipper Balancing Service for the following month, according to the procedures prescribed in paragraph 4A.3.2.
- 4 pm of the next to last working day of the preceding week its own Request for Access to the weekly Shipper Balancing Service for the following week, according to the procedures prescribed in paragraph 4A.3.3.

The Request for Access explicitly contains the commitment to sign the monthly or weekly Shipper Balancing Contract.

The Capacities assigned for the Hydrocarbon Storage Service may not be subject to offers for sale per the present paragraph 5.7.2.

The Storage Company publishes on its own Website as provided by article 6.10 of resolution ARG/gas 165/09, per annex 4A.3.2 and 4A3.3, the outcome of the auction in terms of Storage Capacities offered, requested and assigned for the Shipper Balancing Service as well as the related assignment prices. No later than the same day, the Storage Company communicates to the Authority the detailed results of the competitive procedure.

Once the assignment procedure is completed, the Storage Company makes available on Escomas to interested Shippers the communication attesting the assignment of capacities per paragraph 5.9.1 below, and the new availabilities for the period of the assignment.

The offers to sell capacity for the Shipper Balancing Service may pertain to:

a) The Space assigned and available in the period to which the sale offer is referred.
   Every offer to sell Space capacity does not entail, for the selling party, a change in the minimum and additional Withdrawal Capacity, or recalculation of the utilisation profile per paragraph 2.4.5.
b) The Injection Capacity available for the period to which the sale offer refers.
c) The Withdrawal Capacity available for the period to which the sale offer refers.

For the purposes of the assignment procedure per paragraph 5.9.1 above, the sale offers in which a part or all of the offered capacity is not available on the basis of the data per Annex 4A.4.2 “Monthly Scheduling” or 4A.4.3 “Weekly Scheduling” shall not be deemed valid.

Offers to sell capacity for the Shipper Balancing Service are not allowed for users who, at the date of the communication per this paragraph 5.7.2, have not made payments for the respective contracts stipulated according to this Code for the current Thermal Year or for the previous Thermal Years for amounts already invoiced and already past due, exceeding the values of the respective guarantees issued to cover the obligations deriving from the aforesaid contract.

The Shipper to whom acceptance of the sale offer has been communicated shall in any case remain liable for the payments to the Storage Company for the capacities involved in the Contract for the Modulation Service.

Each participant in the competitive procedures for access to the Shipper Balancing Service relating to a thermal year who has not yet paid the amount per paragraph 5.9.1. for the same Thermal Year, shall pay to the Storage Company an amount of € 1,000 as the charge for its management.
This charge shall be paid only once for each Thermal Year and also in case of non-assignment.

5.8 ASSIGNMENT OF STORAGE CAPACITIES AT THE START OF THE THERMAL YEAR

5.8.1 Subject of the Assignment

The subject of the Assignment at the start of the Thermal Year at the Storage Capacities, expressed in energy (GJ), in terms of Space (S), of Injection Flow Rate (CI) and of Withdrawal Flow Rate (CE), as defined in paragraph 2.4.4 of the chapter “Description of the Storage Facilities and of their Operation”.
Pursuant to Resolution 85/2014, the assignment pertains to a product relating to the Modulation Service with injection of quantities of gas equivalent to the capacity assigned from 1 April until the end of the injection phase (seasonal product) and a product relating to the Modulation Service with injection of quantities of gas equivalent to the capacity assigned only for the month of April (monthly product).

The Storage Company assigns the aforesaid Storage Capacities no later than the date indicated in the procedure published on its Website before the start of the competitive assignment procedures with effect from 1 April of the same year.
No later than 1 February of each year, the Storage Company publishes on its Website the capacities available for assignment at the start of the thermal year, together with the forms per paragraph 5.5.
Parties requesting any assignment of Storage Capacity must first register on the Electronic System of the Storage Company as prescribed by par. 4.3.1.1.

The assignment of the storage capacity also includes Shipper's rights to access the transport network at the interconnection point connected with the Storage System. For this purpose the Storage Company requests from the major Transport company the transport capacity instrumental for the performance of the Storage Services.

5.8.2 Assignment Criteria

Taking into account the order of priorities described in paragraph 5.2, the Storage Company determines the assignable capacities and assigns the Storage Capacities to requesting Users according to the criteria described in the following paragraphs of this chapter.

5.8.2.1. Hydrocarbon Storage Service

The Storage Company determines the assignable capacities for the Hydrocarbon Storage Service in the following way:

a. Assignable Space $SC_{M,k}$ equal to the value $RS_{M,k}$ indicated in the assignment request. If the Requesting User has requested the service with assignment priority on the system of the Major Storage Company, then the assignable value of space will be equal to $RS_{M,k}$ net of the quantity assigned by the Major Storage Company.
b. Assignable Injection flow rate $CIC_{M,k}$ equal to $SC_{M,k}/170$
c. Assignable Withdrawal flow rate $CEC_{M,k}$ (divided into the two components ($CEC_{Mbase,k}$ and $CEC_{Mbackup,k}$) equal to the value indicated in the Request for Access, after the verification that $CEC_{Mbase,k}= SC_{M,k}/120$ and the consistency with the flow rate values authorised by the MSE.
d. For the assignment of any PII_M please refer to paragraph 5.9.3 of this chapter.

If the total Space requested is greater than S_M, the Storage Company shall proceed, in accordance with paragraph 2.4.3.3 of the chapter "description of the facilities and of their operation", to recalculate the space S available for the services, taking into account the total requests received for the Hydrocarbon Storage Service.
If it is impossible to determine a value of S_M that satisfies the requests, the Storage Company will publish the new capacities available on its own Website and shall assign to each Requesting User a space $S_{M,k}$, obtained by allocating S_M pro-rate with respect to the requests $RS_{M,k}$.

5.8.2.2. Strategic Storage service

The Storage Company determines the assignable capacities (S_{STR} and S_S) for the Strategic Storage Service in the quantities indicated in the Request for Access.
If the total quantities requested exceed the available Space, the Storage Company immediately notifies the Requesting Users and the Major Storage Company for the appropriate verifications and the coordinating operations for correct assignment.

5.8.2.3. Balancing Service

The Storage Company determines the assignable capacities and assigns the Space S_{BIL}, CE_{BIL}, CI_{BIL} for the Balancing Service in the quantities indicated in the Request for Access.

5.8.2.4. Modulation service

The assignment of the capacities for the Modulation service, to requesting users meeting the requirements per Par. 5.2, is carried out according to competitive assignment procedures in accordance with Articles 4 and 5 of Resolution 85/2014 and with the procedure for the submission of the requests to purchase capacity, published on the Website of the Storage Company before the aforesaid competitive assignment procedures are started.
The assignment pertains to a product relating to the Modulation Service with injection of quantities of gas equivalent to the capacity assigned from the month following the month of assignment until the end of the injection phase (seasonal product) and a product relating to the Modulation Service with injection of quantities of gas equivalent to the capacity assigned only for the month following the month of assignment (monthly product).

The forms to be used for the purchase requests are published within the scope of the aforesaid procedure.
In accordance with Article 2, Paragraph 4 of the Ministerial Decree of 19 February 2014, the first auction (seasonal and monthly products with injection capacity starting from 1 April), is carried out by Edison Stoccaggio.
The capacity offered for the modulation service is fully included in the total reserved space, in accordance with Article 2, Paragraph 3 of the Ministerial Decree of 19 February 2014, solely to the participation of parties that directly or indirectly supply the end customers per Article 12, Paragraph 7, of Italian Legislative Decree no. 164 of 2000.
For this purpose, the same parties shall specify in the purchase request that the total capacity indicated for which it intends to make use of the reserve is no greater than the pertinent volume indicated in Article 2, Paragraph 3 of the Ministerial Decree of 19 February 2014.
In accordance with Article 5.5 of Resolution no. 85/2014, each purchase request can contain up to 5 (five) bids.
For the purposes of assigning the storage capacity, in any case no later than the submission of the related request, the involved parties present the financial guarantees in the forms and in the amount prescribed by this code or, when otherwise specified, by the related assignment procedure. The price on the basis of which the amount of the guarantees to be provided for participation in the competitive procedures is calculated is equal to the price indicated in the bid. It is possible to present single guarantees for the assignment of capacity in the different procedures for the assignment of capacity for the storage service.
The auctions are carried out accepting, in compliance with the limit per Article 4 Paragraph 2 of the Decree of 19 February 2014, the purchase bids having an offered price that is no lower than the reserve price per Article 6 of Resolution no. 85/2014/R/Gas, according to the economic order of merit compiled on the basis of descending values of the offered price, until the capacities available for each product are exhausted.
In relation to the auctions for the assignment of capacities for the modulation service with seasonal injection that take place in the month of March, the assignment takes place accepting:
a) first the bids, according to the economic order of merit and in compliance with the limit for each party of the capacities for which the reserve was expressed, until exhausting the total offered space capacity;
b) all the remaining bids not yet accepted in accordance with letter a) above, according to the economic order of merit until exhausting the total offered space capacity.
The last accepted purchase bid may be partially accepted if the as yet unassigned capacity is not sufficient to satisfy it entirely. If two or more

bids characterised by the same price are in this situation, they will be partially accepted, allocating the as yet unassigned capacity pro-rata on the basis of the capacity involved in the same bids.
The offered price may be no lower than zero (0).
The assignment price of each competitive procedure for assignment of the capacity for the modulation service with seasonal injection that take place in March is equal to the price indicated in the last purchase bid accepted in the same procedure, or to the lowest of the prices of the last accepted bids in accordance with letters a) and b) above.
The Storage Company communicates to the requesting users the outcome of each competitive procedure, indicating the Space assigned to each individual shipper $S_{MOD,k}$, as the sum of the capacities acquired on the basis of the bids accepted in accordance with letters a) and b) above, in time for the submission of the requests for participation in the subsequent procedure.
The Storage Company communicates to the Authority the detailed results and publishes on its own Website the capacities assigned in each auction.

If the Storage Capacities assigned are lower than the offered Storage Capacities, the Storage Company will publish on its own Website, simultaneously with the assigned capacities, the residual capacities available for the subsequent competitive procedures to be carried out after the start of the thermal year.

The Storage Company assigns the Injection Flow Rate CI_{MOD} and the Withdrawal Flow Rate CE_{MOD} proportionately to the assigned space.

5.8.3 Assignment of unconfirmed capacity

Each Requesting User must confirm, no later than 7 working days from the date on which the Company makes available the Storage Contract through Escomas, the Storage Capacity commitments it intends to sign, within the limits of the corresponding assigned capacities. The confirmation must be delivered in accordance with the procedures prescribed in paragraph 4A.2 of the Annex “Table of Times and Methods of Information Coordination” or, when otherwise specified, in accordance with the procedure published on the Website of the Storage Company before the start of the competitive assignment procedures.

A User who does not execute the Storage Contract or executes the Contract with lower capacity commitments than the assigned capacities shall be assessed the penalty indicated in paragraph 5.3, without

prejudice to claims for greater damages deriving from the failure to comply with the commitments made with the Purchase Request.

5.9 ASSIGNMENT OF STORAGE CAPACITIES AFTER THE START OF THE THERMAL YEAR

In the course of the Thermal Year, the Storage Company shall make new capacity assignments if there is available capacity after the procedures carried out in the month of March, publishing said capacities according to the procedures defined in the subsequent subparagraphs and the times indicated in the schedule of auctions published on its own Website.

5.9.1 Modulation Service

The assignment of the capacities for the Modulation service, to requesting users meeting the requirements per Par. 5.2, is carried out according to competitive assignment procedures carried out monthly in accordance with Articles 4 and 5 of Resolution 85/2014 and with the procedure for the submission of the requests to purchase capacity, published on the Website of the Storage Company before the start of the aforesaid auctions.
In each month of the April-September period, the assignment pertains to a product relating to the Modulation Service with injection of quantities of gas equivalent to the capacity assigned from the month following the month of assignment until the end of the injection phase (seasonal product) and a product relating to the Modulation Service with injection of quantities of gas equivalent to the capacity assigned only for the month following the month of assignment (monthly product).
The auctions are carried out according to the timelines indicated in the schedule published on the Website of the Storage Company before their start.
The procedures for carrying out the competitive auction procedures described in Par. 5.8.2.4 still apply with the exception of the mechanism for forming the assignment price of the assigned capacities.
In accordance with Paragraph 5.15 of Resol. 85/2014, the assignment price of each accepted bid within the auctions subsequent to the first one for the seasonal product (carried out in March) is equal to the related bid price.
The last accepted purchase bid may be partially accepted if the as yet unassigned capacity is not sufficient to satisfy it entirely. If two or more bids characterised by the same price are in this situation, they will be

partially accepted, allocating the as yet unassigned capacity pro-rata on the basis of the capacity involved in the same bids.
The offered price may be no lower than zero (0).

For the purposes of assigning the storage capacity, in any case no later than the submission of the related request, the involved parties present the financial guarantees in the forms and in the amount prescribed by this code. The price on the basis of which the amount of the guarantees to be provided for participation in the auctions is calculated is equal to the price indicated in the bid.
It is possible to present single guarantees for the assignment of capacity in the different procedures for the assignment of capacity for the storage service.
The Storage Company communicates to requesting users the outcome of each auction, indicating the Space assigned to each individual shipper $S_{MOD,k}$, as the sum of the capacities acquired on the basis of the bids accepted for the capacity, reserved and not reserved, in time for the submission of the requests for participation in the subsequent auction.
The Storage Company communicates to the Authority the detailed results and publishes on its own Website the capacities assigned in each auction.

5.9.2 Shipper Balancing Service

If the users of the transport service enter on Escomas respectively bids for the sale of space capacity, injection capacity and withdrawal capacity and requests for the purchase of the same capacities, in accordance with Annex 4A.3.2 and/or 4A.3.3 the Storage Company provides, through a competitive procedure, for the assignment of these capacities according to the procedures described below.

The procedures for selling and assigning the storage capacities relating to the Shipper Balancing Service take place according to two distinct sessions:

a) First session
The Storage Company, for each type of storage capacity, combines its bid, together with the sale bids deemed valid per paragraph 5.7.2 below, with the purchase bids per paragraph 5.7 above.
For this purpose, the purchase requests per paragraph 5.7 above, are sorted according to descending bid price and the sale requests, including the Storage Company's, are sorted according to ascending requested price.

Purchase requests by Requesting Users who do not meet the access requirements described in paragraph 5.2.1.1.3 shall not be deemed valid for the purposes of the assignment procedure per this paragraph.

The assignment price equals the price of the last accepted purchase bid and only the capacities offered for sale at a price no higher than the assignment price shall be assigned.
If, at the assignment price, there are two or more purchase requests at the same amount whose sum, in terms of quantity, is greater than the last assigned sale offer, the assignment shall be carried out according to a pro-rata mechanism.

b) Second session
The Storage Company shall assign the capacities in the second session to the Requesting Users whose capacity request remained unmet in the first session and who specified that they wish to participate in the second session indicating the related offered price.
The capacity requests for the second session shall be considered equal to the portion of capacity that was not met in the first session.

The Storage Company shall assign the Interruptible Capacities on a monthly or weekly basis, per paragraph 3.2.3.2, according to the following procedures: for each type of capacity, the Storage Company combines its bid with the purchase requests sorted in ascending order according to the bid price. For the purposes of the assignment, the purchase requests whose price is lower than the price set by the Storage Company shall not be deemed valid.

If the sum of the Capacities of the purchase requests considered valid is:

- Lower or equal to the quantity offered by the Storage Company, the assignment price shall be equal to the price established by the Storage Company;
- Higher than the quantity offered by the Storage Company, the assignment price shall be equal to the price of the last accepted purchase bid. If, at the assignment price, there are two or more purchase requests at the same amount whose sum, in terms of quantity, is greater than the residual sale offer, the assignment shall be carried out according to a pro-rata mechanism.

5.9.3 Assignment of the Reverse flow service

The Storage Company makes available the Withdrawal service, for the purposes of Shipper Balancing, during the Injection period as described in paragraph 5.9.1.

A Shipper who intends to make use of the reverse flow Service during the Withdrawal Period for a given month, is not obligated to make an express assignment request, since injection capacity is assigned on an annual basis. If the Shipper needs an increase in the aforesaid performance, it must request the assignment of a PII_M according to the procedures according to the following paragraph or the assignment of the performance made available within the Shipper Balancing Service as described in paragraph 5.7.

5.9.4 Assignment of the Interruptible Incremental Peak (PII_M)

The Storage Company assigns the monthly or weekly Interruptible Capacities for the purposes of the Shipper Balancing Service, according to the procedures described in paragraph 5.9.1 above.

If Interruptible Capacity for periods of less than one week becomes available, the Storage Company publishes on its Website, and makes available on Escomas, the access timelines, the duration and the amount of the Performance made available to the Shippers.
A Shipper who intends to make use of the interruptible incremental peak performance must transmit a request for assignment to the Storage Company, entering on Escomas the information requested by it for filling out the form, available on the Website, no later than the term indicated in the publication of this availability on the Website and on Escomas, as indicated in the paragraph 4A.3.1 of the Annex “Table of Times and Methods of Information Coordination”.
If the Shipper’s requests for capacity exceed the availability, the Storage Company assigns the capacities pro-rata with respect to the requests.
The Storage Company will inform the Shippers who have submitted an assignment request, through Escomas, the total quantity assigned, no later than 4 pm of the same day. The Shipper will enter into the system its overall scheduling for the period involved in the assignment, no later than 1 pm of the following working day.

5.10 AGREEMENT TO PLEDGE COLLATERAL ON GAS IN STORAGE

(on the Shipper's letterhead)

AGREEMENT TO PLEDGE COLLATERAL ON GAS IN STORAGE

Edison Stoccaggio S.p.A.
Foro Buonaparte, 31
20121 Milan, Italy

SUBJECT: AGREEMENT TO PLEDGE COLLATERAL

[COMPANY NAME], with its registered office in _____, share capital_____fully paid in, Taxpayer ID Number and VAT Number _____,R.E.A._____represented by _____in its capacity as _____ (hereafter, "SHIPPER");

WHEREAS:

a) Edison Stoccaggio S.p.A. ("EDISON STOCCAGGIO") operates in the sector of natural gas storage and it has provided in its own Storage Code the possibility of pledging as collateral the gas owned by the Shipper in storage, to guarantee the exact fulfilment of the obligations undertaken by the Users of the storage services;

b) Edison Stoccaggio, following an assignment request and as a result of an appropriate process, has assigned natural gas storage capacity for the thermal year (1 April 20__/31 March 20__) to the SHIPPER and, on _____, the SHIPPER stipulated a specific storage contract ("CONTRACT");

Now, therefore, the SHIPPER, in accordance with the Storage Code and for the cases provided for therein

AGREES

to the pledge, in favour of Edison Stoccaggio, of the gas owned by the Shipper that is physically present in storage as collateral to guarantee the obligations undertaken with the CONTRACT ("Gas as Collateral") which, as a result, may be made unavailable for the period necessary for the storage company to safeguard its credit right.

Edison Stoccaggio will communicate to the Shipper the pledging of the Gas as collateral according to the procedures and within the terms indicated in Chapter 16.4.4 of the Storage Code.
For this purposes, the SHIPPER, aware that the Gas pledged as Collateral, even when pledged as a guarantee in favour of third parties, may nonetheless be purchased as a priority from Edison Stoccaggio until the total payment of the credit deriving from the CONTRACT.

CONFERS

IRREVOCABLE POWER TO Edison Stoccaggio, so that the latter, if the reasons for the enforcement of the Guarantee come true, as established by the Storage Code, may:

(i) sell, on its own behalf, the Gas pledged as Collateral;

(ii) draw directly from the revenues of the sale to satisfy its credit.

In case of partial enforcement, the residual Gas pledged as Collateral will revert to be the property of the SHIPPER.

Date and place SEAL AND SIGNATURE

CHAPTER 6

INJECTION AND WITHDRAWAL RESERVATION AND COMMITMENTS

6.1 FOREWORD

The Storage Company, in order to plan and optimise the performance of its own storage sites, has the need to know, accurately and adequately in advance, the quantities of Gas which the Shippers intend to inject into or withdraw from the System.

Adequate knowledge of the aforementioned matters also enables the Storage Company to communicate with the infrastructure operators, in order to coordinate their respective activities as closely as possible.

For this reason, Shippers must communicate their own reservations to the Storage Company, with the level of detail and the deadlines described below.
The only reservations that are binding both for Shippers and for the Storage Company are the daily reservations and the physical reverse flow reservations as defined in paragraphs 6.2.1 and 6.6 of this chapter.

If the Shipper does not deliver its reservations to the Storage Company, or if they do not contain all the required information, the Storage Company shall use the reservation with the higher level of time.

If this is not possible and in case of absolute lack of data, the Storage Company will set the required parameters to zero.

Under resolution 297/2012/R/gas as amended, the Storage Company requests transport capacity for the purposes of providing its services to the Shippers and becomes, in accordance with the indications received from the Shippers, responsible for obligations descending from the related transport contract, instrumental for the injection and the withdrawal of the gas owned by its Shippers respectively at the inlet point and of the outlet point of the national network of the pipelines interconnected with the Storage System. The aforesaid obligations include planning the quantities injected and withdrawn, owned by each Shipper, at the aforesaid points, and meeting quality and pressure parameters.

The Storage Company delivers the quantities of Gas owned by its own Shippers to the Major Transport Company and the latter delivers them to the Storage Company for the purpose of the utilisation of the Storage Services by the same Shippers.

Based on the schedules received from its Shippers, the Storage Company transmits to the Major Transport Company the schedules in relation to the inlet

and outlet point of the transport network interconnected with the Storage System. These schedules are provided indicating the details for each Shipper.

6.2 CONSTRAINTS TO THE INJECTION AND WITHDRAWAL SCHEDULES

For all Storage services subscribed with the Storage Company, the Shipper shall comply, in formulating the Injection and Withdrawal Schedules, the PE and PI pertaining to it and the utilisation profiles.

Considering the close interdependence between the performance of the Storage System and the global behaviour of all Shippers, to safeguard the functionality and performance of the System, the Shipper shall comply with the schedules, whose determinations and procedures for communication acceptance and amendment are indicated in this chapter.

The Shipper may use, in any Gas-Day G, the Injection and Withdrawal Capacities assigned to it and available, in accordance with the following paragraphs of this chapter, in view of the initial assignment and of any subsequent transfers and/or sales per this Code, which should occur in the course of the Thermal Year.
The Shipper does not have available Injection Capacity if the Space assigned to it is exceeded and it does not have Withdrawal Capacity available in case of utilisation of Gas in addition to the amount to which it is entitled.

The quantity of gas that can be withdrawn by the Shipper or sold within the scope of gas sales or exchanges per chapter 7 below does not include the quantity of Guarantee Gas in favour of the Company in Charge of Balancing per paragraph 8.2.1.4 below and the quantity per paragraph 16.4.4 below.
The Shipper shall also formulate all the Reservations and in particular the daily reservation and the reformulation of the daily schedule, considering also any quantity of Guarantee Gas in favour of the Company in Charge of Balancing per paragraph 8.2.1.4 below and the quantity per paragraph 16.4.4 below.
Edison Stoccaggio S.p.A will not confirm the Reservations or Reformulations that entail the utilisation of said quantity.

6.2.1 Scheduling the quantities in Reverse flow

Shippers who have withdrawal capacity available during the injection phase and injection capacity during the withdrawal phase communicate the daily scheduled quantities according to the timelines prescribed in the following paragraphs 6.4, 6.5 and 6.6.

The Storage Company verifies, on the basis of the data received, whether the reverse flow condition is met and determine its type according to the following procedure:

1. Determination of the Daily Planned Flow Rate

   The Planned Maximum Daily Flow Rate (PMGPf) of day G is equal to:
   a. Sum of the Shippers' Withdrawal reservations for day G during the Withdrawal Period;
   b. Sum of the Shippers' Injection reservations for day G during the Injection Period.

   If the reservation of one or more of the Shippers is not available, the Storage Company shall use, for the purposes of calculating the PMGPf, the Shippers presumed PE or PI on day G.

2. Determination of the Daily Planned Reverse Flow Rate
   The Planned Maximum Daily Reverse Flow Rate (PMGPcf) of day G is equal to:
   c. Sum of the Shippers' Injection reservations for day G during the Withdrawal period;
   d. Sum of the Shippers' Withdrawal reservations for day G during the Injection Period.

3. Identification of the type of Reverse Flow:

   The Reverse Flow is defined Physical if:

   $$PMGPf \leq PMGPcf$$

   In the other cases it is Virtual.

If the Reverse Flow is Physical, the Storage Company communicates no later than 2 days prior to the first day G of the period in which the physical reverse flow is carried out, to all Shippers, that starting from day G the reservations received and presumed required the reversal of the movement of the gas from the System, indicating for each of them the reservations used to calculate the reverse flow condition and the availabilities for the previous day G-1, for the period when the physical reverse flow condition occurs and for the following day G+1.
No later than 1 pm of the working day after the communication, Shippers shall send to the Storage Company the best estimate of their reservation for the days G of the reverse flow period and G-1. If no communication is received, the Storage Company will use the data per the aforesaid communication.
In light of the new data, the Storage Company will recalculate the type of reverse flow for the days of the period in question, and it will establish the set-up of the

reservoirs, giving simultaneous and definitive notice thereof to the Shippers. Scheduling changes after this communication will be accepted only if they are feasible with the current set-up or if they are compatible with the technical times required for any new set-up that should become necessary. In such cases, the Storage Company will minimise impacts on the Shippers, assuring the available flow performance first to the Users of the Modulation Service and residually to the Users of the Shipper Balancing Service.

If the Reverse Flow is Virtual, any scheduling changes will be accepted only if they are feasible with the current set-up or if they are compatible with the technical times required for any new set-up that should become necessary. In such cases, the Storage Company will minimise impacts on the Shippers, assuring the available performance first to the Users of the Modulation Service and residually to the Users of the Shipper Balancing Service.

6.3 ANNUAL SCHEDULING

6.3.1 Annual schedule of maintenance operations

No later than 1 February of each year (or, if it is a holiday, the last preceding working day), the Storage Company publishes on its Website and makes available on Escomas the Plan of Maintenance Operations scheduled for the following Thermal Year, which will cause the unavailability or reduction of the Storage Capacities. The Maintenance Plan, its content and the procedures for updating it are defined in paragraph 13.3 of the chapter “Scheduling and Managing Maintenance Operations”.

6.3.2 Shipper’s Annual Schedule

No later than the date indicated in the assignment procedure published on the Website of the Storage Company before the start of the competitive assignment procedures, after the Assignment of the Storage Capacity, the Shipper shall make available on Escomas, in accordance with the procedures prescribed in paragraph 4A.4.1 of the Annex “Table of Times and Methods of Information Coordination”, an Annual Schedule containing:

1. The Injection reservation indicating the monthly Gas Injection profile until the exhaustion of the assigned Space;
2. The Withdrawal reservation indicating the monthly Gas Withdrawal profile, providing for the complete withdrawal of the Gas to which the Shipper is entitled, with the exception of any quantities of Gas held in storage for strategic purposes.

The Annual Schedule must take into account the indications provided by the Storage Company in the annual Maintenance Plan.

6.3.3 Half-yearly revision of the Maintenance Plan

The Storage Company reserves the right to revise the Maintenance Plan, with half-yearly periodicity, as indicated in paragraph 13.3.2 of the chapter “Scheduling and Managing Maintenance Operations”.

6.3.4 Revision of the Shipper’s Withdrawal reservation

No later than 15 September, the Shipper may make the revised Withdrawal reservation available on Escomas, taking into account the indications provided by the Storage Company in the half-yearly revision of the Maintenance Plan and in accordance with the procedures prescribed in paragraph 4A.4.1 of the Annex “Table of Times and Methods of Information Coordination”.

6.4 MONTHLY SCHEDULING

6.4.1 Available performance

No later than the 15th of the Month preceding the month of service performance, the Storage Company makes available on Escomas the Daily Performance (expressed in energy) available for the following Month, in accordance with the procedures prescribed in paragraph 4A.4.2 of the Annex “Table of Times and Methods of Information Coordination”.
With regard to the Users of the Shipper Balancing Service, the available Performance following the assignment of capacity on a monthly basis are communicated at the same time as the conclusion of the competitive procedure per paragraph 5.9.1 above, according to the times indicated in paragraph 5.7 and in paragraph 4A.3.2 of the Annex “Table of Times and Methods of Information Coordination”.

The aforesaid Performance is calculated taking into account the most up to date Maintenance Plan available to the Storage Company.

6.4.2 Shipper’s Monthly Reservation

The Shipper communicates, according to the procedures prescribed in paragraph 4A.4.2 of the Annex “Table of Times and Methods of Information Coordination”, to

the Storage Company no later than 4 pm of the 20th day of each month preceding the Reservation, its own reservation containing the quantities of gas, expressed in energy, which the Shipper plans to inject/withdraw for each day of the following Month for each Contract. The Shipper also provides the Storage Company, together with the above information, its best estimate about the quantities of energy, expressed in GJ/day, expected to be injected or withdrawn in the two following months.

The User of the Shipper Balancing Service makes available on Escomas its reservation containing the quantities of gas, expressed in energy, it expects to inject/withdraw for each day of the month of the assignment no later than 4 pm of the last working day preceding the start of the month M as specified in Annex 4.A3.2 of the Annex "Table of Times and Methods of Information Coordination".
The Storage Company also ensures that the reservations formulated by its own Shippers match the transport schedule requested by the Storage Company from the Major Transport Company. The Shipper must formulate the Reservations for Withdrawal net of internal consumption of gas as defined in chapter 8.

6.5 WEEKLY SCHEDULING

6.5.1 Available performance

No later than 4 pm of each Tuesday, the Storage Company makes available on Escomas the Daily Performance (expressed in energy) available for the following week, in accordance with the procedures prescribed in paragraph 4A.4.3 of the Annex "Table of Times and Methods of Information Coordination".

With regard to the Users of the Shipper Balancing Service, the available Performance following the assignment of capacity on a weekly basis are communicated at the same time as the conclusion of the competitive procedure per paragraph 5.9.1 above, according to the times indicated in paragraph 5.7 and in paragraph 4A.3.3 of the Annex "Table of Times and Methods of Information Coordination".

The aforesaid Performance is calculated taking into account the most up to date Maintenance Plan available to the Storage Company.

6.5.2 Weekly reservation

No later than 1 pm of each Thursday, the Shipper communicates to the Storage Company, through Escomas, according to the procedures prescribed in

paragraph 4A.4.3 of the Annex "Table of Times and Methods of Information Coordination", its own reservation containing the quantities of gas, expressed in energy, which the Shipper plans to inject/withdraw for each day of the following Week for each Contract, together with the quantities to be moved within the scope of the Shipper Balancing Service. Reservations shall take into account any capacity reductions/interruptions planned in the weekly schedule of the Storage Company.

The User of the Shipper Balancing Service makes available on Escomas its reservation containing the quantities of gas, expressed in energy, it expects to inject/withdraw for each day of the week following the assignment of capacity on a weekly basis, no later than 6 pm of the working day following communication of the results of the competitive procedure, as specified in Annex 4.A3.3 of the Annex "Table of Times and Methods of Information Coordination".

The Storage Company also ensures that the reservations formulated by its own Shippers match the transport schedule requested by the Storage Company from the Major Transport Company.

The Shipper must formulate the Reservations for Withdrawal net of internal consumption of gas as defined in chapter 8.

If the Shipper does not comply with the prescriptions of this paragraph, the Storage Company will deem valid for the following Week the values of the monthly schedule present in Escomas.

6.5.3 Confirmation of the weekly reservation

Weekly reservations are deemed tacitly confirmed if, no later than 5 pm of the Thursday preceding the Performance, the Storage Company has not made available on Escomas any revision of the weekly operating schedule.

6.6 DAILY SCHEDULING

6.6.1 Available Daily Performance

No later than 12 noon of each Gas-Day G, the Storage Company communicates, through Escomas and in accordance with the procedures prescribed in paragraph 4A.4.4 of the Annex "Table of Times and Methods of Information Coordination", any changes to the Daily Performance (expressed in energy) available for the next Gas-Day G+1 as well as the Daily Performance available for day G.

6.6.2 Daily reservations

No later than 1 pm of each Gas-Day G, the Shipper communicates to the Storage Company, through Escomas and in accordance with the procedures prescribed in paragraph 4A.4.4 of the Annex “Table of Times and Methods of Information Coordination”, the reservation, expressed in energy (GJ/day) for the next Gas-Day G+1 for each Contract, including the Shipper Balancing Service.

The Storage Company also ensures that the reservations formulated by its own Shippers match the transport schedule requested by the Storage Company from the Major Transport Company.

The Shipper must formulate the Reservations for Withdrawal net of internal consumption of gas as defined in chapter 8.

If the Shipper does not comply with the prescriptions of this paragraph, the Storage Company will deem valid for Gas-Day G+1 the values of the weekly or monthly schedule present in Escomas.

For the purposes of determining the maximum and minimum limits and the Overall System Imbalance, if the Reformulations per paragraph 6.6.3 below are not received, the quantities confirmed by the Storage Company shall be deemed valid.

The User of the Operational Balancing Service for transport companies updates, on the Escomas system, no later than 9 am of Gas-Day G and in accordance with the procedures prescribed in paragraph 4A.4.4 of the Annex “Table of Times and Methods of Information Coordination”, the value of the capacity reservations at the Storage Hub of Edison Stoccaggio S.p.A. of Gas-Day G-1.
The User of the Operational Balancing Service for transport companies enters into the Escomas system, no later than 1 pm of Gas-Day G and in accordance with the procedures prescribed in paragraph 4A.4.4 of the Annex “Table of Times and Methods of Information Coordination”, the estimated value of the capacity reservations at the Storage Hub of Edison Stoccaggio S.p.A. of Gas-Day G+1.

The Shipper shall also formulate the reservation considering also any quantity of Guarantee Gas in favour of the Company in Charge of Balancing per paragraph 8.2.1.4 below and the quantity per paragraph 16.4.4 below.
Edison Stoccaggio S.p.A will not confirm the Reservations that entail the utilisation of said quantity.

6.6.3 Reformulation of daily schedule in Gas-Day G

No later than 5 pm of each Gas-Day G, the Shipper may reformulate its reservation for Gas-Day G itself, communicating to the Storage Company, through Escomas and in accordance with the procedures prescribed in paragraph 4A.4.4 of the Annex "Table of Times and Methods of Information Coordination", its Reformulation of the reservation, expressed in energy (GJ/day), for each Contract, including the Shipper Balancing Service.
If the Shipper does not comply with the prescriptions of this paragraph, the Storage Company will deem valid for Gas-Day G the most recent data present in Escomas.
The Storage Company also ensures that the Reformulation of the reservation matches the transport schedule requested by the Storage Company from the Major Transport Company.
The Shipper must reformulate the Reservations for Withdrawal net of internal consumption of gas as defined in chapter 8.
If the Reformulation of the reservation provided to the Storage Company does not match the one provided to the Major Transport Company, both for the purposes of calculating the minimum and maximum limits per paragraph 8.7 below and for the purposes of calculating the Overall System Imbalance by the Company in Charge of Balancing, the Reformulations confirmed by the Storage Company shall be deemed valid.

The Shipper shall also reformulate the daily schedule, considering also any quantity of Guarantee Gas in favour of the Company in Charge of Balancing per paragraph 8.2.1.4 below and the quantity per paragraph 16.4.4 below.
Edison Stoccaggio S.p.A will not confirm the Reformulations that entail the utilisation of said quantity.

6.6.4 Confirmation of the daily schedule and of the reformulation of the daily schedule

The Shipper's daily reservation for Gas-Day G+1 shall be understood to be tacitly confirmed, excepting the cases per subparagraph 6.2.1 of this chapter, if by 7 pm of Gas-Day G the Storage Company has not made available on Escomas to the Shipper, by means of a notification email, any revision to its daily performance for Gas-Day G+1, taking into account the impacts of any reformulations of the reservation. In this case the Shipper shall make available on the Escomas system, no later than 7.30 pm of Gas-Day G, the scheduling consistent with the new availability notified.

Moreover, the Storage Company shall assess whether the Reformulation of the daily schedule is totally or partially unacceptable according to the criteria defined

in paragraph 6.6.5 below. No later than 6.30 pm of Gas-Day G, the Storage Company makes available on the Escomas system the scheduling values accepted for the Shipper. These quantities may not be modified by the Shipper and they are tacitly accepted by it.

For each Gas-Day G, no reservations or reformulations will be accepted if they exceed:

1. For Injection, the lower value between the Injection Capacity and the Shipper's residual Space available with reference to the same Gas-Day G;

For Withdrawal, the lower value between the available Withdrawal Capacity and the residual stock available for the Shipper in the same Gas-Day G, to which may be added quantities of Strategic Gas subject to the MSE's prior authorisation, and until exhausting the quantities corresponding to the bank guarantee or to the amount paid per paragraph 8.4.3 below, subtracting any quantity of Guarantee Gas in favour of the Company in Charge of Balancing per paragraph 8.2.1.4 below and the quantity per paragraph 16.4.4 below. In these cases, the quantities confirmed by the Storage Company shall be equal to the values per the above points.

6.6.5 Criteria for the acceptance of the reformulation of the daily schedule in Gas-Day G

The Storage Company shall verify on a daily basis, depending on the petrophysical characteristics of the reservoirs comprising its own Hub, the available performance and the quantities recorded upon receipt of the reformulation, the maximum and minimum levels of the total performance that can be guaranteed following reformulations of the Shipper's daily reservation. The Storage Company will not accept reformulations of the Shipper's daily reservation if the total amount submitted by the Shippers is not included in the minimum and maximum feasibility ranges described above.
If it is technically possible, the Storage Company will bring back to the aforesaid limits the result of the reformulations, partially accepting the reformulations of the daily reservation, confirming first the requests referred to continuous capacities over those referred to interruptible capacities and repositioning the quantities required, when necessary, with a pro-rata criterion on the requests received within the priorities of the storage services.

6.6.6 Criteria for determining the direction of the prevalent flow FP_i for Gas-Day G:

The Storage Company, after accepting the reformulation of the daily schedule of Gas-Day G per the preceding paragraph, on the basis of the physical movement from the storage and taking into account the indications received for the purposes of the physical balancing of the system from the company in charge of balancing, publishes on its own Website, no later than 6.45 pm, the direction of the prevalent flow FP_i according to the following criteria:

FP_i will coincide with:

a) the direction of injection, if the quantities expected to be injected on Gas-Day G are greater than the quantities expected to be withdrawn on the same Gas-Day G;
b) the direction of withdrawal, in the opposite case.

The provisions of this paragraph shall apply from 1 April 2013 onwards.

CHAPTER 7

CAPACITY AND GAS TRANSACTIONS

7.1 AUTHORISED PARTIES

Capacity and/or Gas transactions can take place between Shippers, i.e. between parties who meet the requirements necessary to access the Storage Services of the Storage Company, as indicated in chapter 5 “Assignment of Storage Capacity”. Although nothing prevents Shippers entitled to committed capacity from signing agreements with unauthorised requesting users, a preliminary condition for the latter to be able to access the service is their obtaining the qualification as Shipper.

The selling Shipper remains in any case liable to the Storage Company for failure to comply with the payment obligations assumed by the buying Shipper.

7.2 SALES AND EXCHANGES OF CAPACITY AND GAS

The sale and/or the exchange of Capacity Assigned to Shippers and the sale and/or the exchange of the Gas placed in storage are carried out on the basis of procedures defined with instructions by the Authority.
Until the approval of such instructions, the sale and the exchange of capacity and Gas are regulated by the provisions that follow.
The sale and/or exchange can take place in terms of:

1. Space Capacity (S);
2. Space Capacity (S) and Withdrawal Capacity (CE);
3. Injection Capacity (CI);
4. Withdrawal Performance (PE);
5. Injection Performance (PI);
6. Withdrawal extra peak;
7. Monthly Interruptible Incremental Peak (PII_M);
8. Gas;
9. Combination per the above points.

The aforesaid transactions can take place only in favour of Shippers and/or Requesting Users having the requirements for access to the type of performance involved in the sale. For example, the sale of capacity for the hydrocarbon storage service can take place only between parties satisfying the requirements per paragraphs 5.2.2 and 5.7.2.1 of the chapter “Assignment of storage capacity”.

7.3 SALE AND EXCHANGE REQUEST PROCEDURE

7.3.1 Request for sale and/or exchange of Capacity

The request for sale and/or exchange of Capacity must be received in accordance with the procedures defined in paragraph 7.3.4 and it must contain the following information:

1. The Storage Capacities involved in the sale and/or exchange;
2. The involved Parties;
3. The starting date of the sale and/or exchange;
4. The Shipper to be invoiced for the transaction management costs, if different from the selling Shipper.

The sale of the Storage Capacity is valid from the date indicated in the request until the end of the current Thermal Year.

Space sales are allowed only if the stock of the selling Shipper is smaller than the assigned Space, otherwise the sale of Space will have to be combined with a sale of Gas.
Subject to the provisions of paragraph 7.4 below, sales of Space alone are allowed during the Injection Period only and do not imply a change to the Withdrawal Performance except when the portion of CE is also sold.
During the Withdrawal Period, Space sales per Point 2 of Paragraph 7.2 are allowed.

The term “sale of CE and CI capacities” means the sale of the assigned portion of capacity and of the Performance that derives from the application of the adjustment coefficients and of the utilisation profiles.

7.3.2 Request for sale and/or exchange of Performance

The request for sale and/or exchange of the Performances per points 4) through 7) of Paragraph 7.2 of this chapter must be received in accordance with the procedures defined in paragraph 7.3.4 and it must contain the following information:

1. The portion of the Performance to be sold and/or exchanged with daily details;
2. The involved Parties;
3. The Shipper to be invoiced for the transaction management costs, if different from the selling Shipper.

In the days when the transaction between the Shippers is in force, the buying Shipper will have a daily Performance as determined by the application of the adjustment coefficients plus the portion sold by the seller; conversely, the selling Shipper will have its own daily Performance of the sold portion reduced accordingly.
The sale of Performance above the available value is not allowed; therefore, if the selling Shipper has exhausted the Gas held in storage or has filled the space assigned to it, it may not sell respectively Withdrawal Performance and Injection Performance.

For the term of validity of the transaction, the Storage Company will determine the prices to be invoiced to the buying Shipper and to be subtracted from the amount invoiced to the Selling Shipper according to the following formula applied to each day of the term of validity of the transaction:

$$C * \beta_{cessione} * f_P \ 1/Ng$$

Where:
C = Injection Capacity and/or Withdrawal Capacity and/or Withdrawal Extra Peak and/or Interruptible Incremental Peak on a monthly basis assigned to the selling Shipper
f_P = unit price approved by the AEEG, for the Performance to be transferred
$\beta_{cessione}$ = Performance sold/Performance available
Ng= number of days of the reference phase

7.3.3 Request for sale and/or exchange of Gas

The request for sale and/or exchange of Gas per point 8) of Paragraph 7.2 of this chapter must be received in accordance with the procedures defined in paragraph 7.3.4 and it must contain the following information:

1. The quantity of Gas involved in the transaction and/or exchange, with daily details;
2. The involved Parties;
3. The Shipper to be invoiced for the transaction management costs, if different from the selling Shipper.

A Shipper may not carry out sales of Gas if the stock of the selling Shipper is less than zero as a result of the transaction.

Edison Stoccaggio S.p.A. shall inhibit the execution of the sale and/or exchange of Gas from the selling to the buying Shipper if the stock of the selling Shipper, minus any quantity of Guarantee Gas in favour of the Company in Charge of

Balancing per paragraph 8.2.1.4 below and the quantity per paragraph 16.4.4 below, shows, on the basis of the data per paragraph 8.2 of this Code relating to the Gas Day preceding the one starting from which the sale should be validated, a withdrawal of Gas exceeding the Gas it owns.

For the purposes of the aforesaid verification, Edison Stoccaggio S.p.A. will consider on each day the chronological order of acceptance of the sales by the buying Shipper, verifying, for each selling Shipper, the daily balance of the sales and excluding, in succession, first the last transaction accepted if the daily balance entails use of strategic gas by the selling Shipper or excess Space utilisation by the buying Shipper, until the conditions of validity are reached.

In such cases, the application of the prices prescribed in paragraph 8.4 of the Storage Code expressly remains valid.
In the case per the present paragraph, Escomas will send an email to both Shippers, communicating that the sale could not be completed.
The sale shall also be inhibited if, as a result of the sale, the buying Shipper will exceed its available Space on the basis of the data per paragraph 8.2 of this Code.

7.3.4 Terms and Effectiveness of the transaction request

The request for sale and/or exchange shall be made available on Escomas or sent in advance via fax and/or e-mail to the Storage Company by the selling Shipper and/or by the buying Shipper in case of malfunction of the Electronic System, no later than 1 working day before the start of the month of entry into force of the sale and/or exchange; moreover, no later than the last day of the previous month, the document must be delivered to the Storage Company in original form.
The aforesaid request, signed by the Parties, shall be sent by the involved Shippers to the Storage Company, according to the procedures and with the means indicated by paragraph 4A.5.1 of the Annex “Table of Times and Methods of Information Coordination”.

The sale and/or exchange can take place starting on the first day of the following month and it has effect starting from any infra-monthly day, with a minimum daily duration, with the exception of the cases per Paragraph 7.2 Points 1), 2) and 3), for which the duration shall be until the end of the Thermal Year.

If the involved Shippers do not deliver the documentation according to the prescribed procedures and times, the Storage Company shall not process the request for sale and/or exchange, notifying both involved Shippers in writing that the transaction could not be completed, no later than the last working day

of the month preceding the month to which the request for sale and/or exchange refers.

Sales of capacity shall have no effect for the Storage Company if the selling Shipper and the buying Shipper: (i) have not, at the date of the request, completed the payments due by both of them for the respective Contracts for the current Thermal Year or for the previous Thermal Years for invoiced amounts, and already past due, exceeding the values of the respective guarantees issued to cover the obligations deriving from the aforesaid Contracts; (ii) do not meet one of the requirements for the validity of the sale.

In these cases, the Storage Company shall notify both involved Shippers in writing that the transaction could not be completed, no later than the last working day of the month preceding the month to which the request for sale refers.

7.4 GAS SALES FOR BALANCING

The Shipper that has experienced the cases described in Paragraphs 8.4 of the chapter “Balancing and replenishment of the storage sites”, may, for the purposes of offsetting its own storage position, carry out a transaction in terms of:

1. Gas

Edison Stoccaggio S.p.A. shall inhibit the execution of the sale of Gas from the selling to the buying Shipper if the stock of the selling Shipper, minus any quantity of Guarantee Gas in favour of the Company in Charge of Balancing per paragraph 8.2.1.4 below and the quantity per paragraph 16.4.4 below, shows, on the basis of the data per paragraph 8.2 of this Code relating to the Gas Day preceding the one starting from which the sale should be validated, a withdrawal of Gas exceeding the Gas it owns.

For the purposes of the aforesaid verification, Edison Stoccaggio S.p.A. will consider on each day the chronological order of acceptance of the sales by the buying Shipper, verifying, for each selling Shipper, the daily balance of the sales and excluding, in succession, first the last transaction accepted if the daily balance entails use of strategic gas by the selling Shipper or excess Space utilisation by the buying Shipper, until the conditions of validity are reached.

In such cases, the application of the prices prescribed in paragraph 8.4 of the Storage Code expressly remains valid.

In the case per the present paragraph, Escomas will send an email to both Shippers, communicating that the sale could not be completed.
The sale shall also be inhibited if, as a result of the sale, the buying Shipper will exceed its available Space on the basis of the data per paragraph 8.2 of this Code.

Sales of Gas do not imply the sale of the associated PE performance.

The sale request, per this paragraph, signed by the Parties, shall be made available on Escomas by the involved Shippers to the Storage Company no later than 15 days from the Shippers' date of receipt of the data about its own decision, as indicated in paragraph 4A.5 of the Annex " Table of Times and Methods of Information Coordination".

The request shall contain the following information:
a) The quantities of Gas involved in the sale, with daily details;
b) The involved Parties;
c) The starting date and the duration of the sale;
d) The Shipper to be invoiced for the transaction management costs, if different from the selling Shipper.

If the involved Shippers do not deliver the documentation according to the prescribed procedures and times, the Storage Company shall communicate that the transaction request was denied no later than 15 days from the deadline for receipt of the requests and shall not apply the provisions contained therein.

7.5 OWNERSHIP OF THE CAPACITY AND/OR OF THE GAS SOLD/EXCHANGED

Ownership of the Storage Capacity and/or of the Performance and/or of the Gas sold and/or exchanged is transferred from the "selling" Shipper to "buying" Shipper throughout the term of validity of the transaction. Therefore, the Storage Company invoices to the "buying" Shipper the corresponding prices, as provided in the chapter "Invoicing and payment". At the end of the period indicated in the sale request, ownership of the capacity and/or of the Gas returns to the selling Shipper.

7.6 COSTS

The costs to be paid to the Storage Company, to cover the additional expenses incurred for the completion of the exchange and/or sale transactions are set at a fixed amount of € 550.00.
The fixed amount is reassessed each Thermal Year starting from the 2007-2008 thermal year, applying the general consumer price index for blue collar and white collar households published by ISTAT.
The amount shall be due to the Storage Company by the selling Shipper only, unless there is a different indication, signed by the parties, in the request form. In this case, the procedures for allocating the amount between the Shippers shall be indicated in a clear and immediately applicable manner.
Otherwise, the Storage Company shall invoice the Amount to the selling Shipper.
The aforesaid amount shall be due to the Storage Company even if the Storage Company notifies that the transaction could not be completed.

CHAPTER 8

BALANCING AND REPLENISHMENT OF THE STORAGE SITES

8.1 FOREWORD

The chapter describes the procedures whereby the Storage Company determines the positions of each Storage Shipper in line with the balancing system prescribed by the resolutions and by agreements with the other operators.
In particular, under the balancing system in force the Users of the Transport Network are allocated on the storage systems the sum of the scheduled gas quantities (injected or withdrawn over the totality of the storage Hubs of the Italian system) taking into account internal consumption, and the quantities of gas sold or bought in the balancing session prescribed by Resolution ARG/Gas 45/11 as amended (defined as SCS: the difference, for a Gas-Day G, between the total energy scheduled at the inlet and outlet points interconnected with the storage sites on the basis of the reservations per paragraph 15.3 of Resolution no. 137/02 and the energy measured at the same points. The Storage Company allocates to Shippers the quantities scheduled for injection or withdrawal by each individual Shipper on its own Hubs, taking into account the pertinent share of internal consumption, increased and/or reduced by the quantities of gas sold and/or purchased in the balancing session by the Shipper and pertaining to the Hub of the Storage Company. These quantities are determined on the basis of an operating procedure agreed by the involved operators (storage companies, RNG transport companies, GME).

Although Edison Stoccaggio S.p.A. made preparations for the balancing market to be started on 1 December 2011, while awaiting the conclusion of the operational agreements with the Company in Charge of the Balancing, instrumental for the full implementation of the provisions of Resolution ARG/Gas 45/2011, it agreed to adopt a simplified mechanism for the start of the market in the period from 1 December 2011 to 31 March 2012. Starting on 1 April 2012 or as soon as the agreements with the involved operators are concluded, the natural gas balancing service will be fully applied through the use of the resources available at the hub of Edison Stoccaggio S.p.A.

For the purposes of the correct management of the system, the Storage Company shall exercise its system maintaining the safety of the system and with a coordinated, integrated operation of all its facilities. For this purpose, through its own dispatching, the Storage Company continuously monitors the parameters of the System and ensures the correct planning, safety and efficiency of the System.

The Shipper instead shall comply with the operating schedules per chapter 6 and with the balancing of the quantities injected and withdrawn from the System, taking into account any attributed consumption.
If a Shipper withdraws gas in excess relative to the gas held in storage, the Storage Company shall consider it as Gas withdrawn from the strategic reserve. The gas allocation procedures described below determine that withdrawal beyond the gas held in storage may take place only in the case of the modulation service.

The chapter therefore describes the procedures for allocating the quantities of gas moved daily at the Hub of the Storage Company, the methods for calculating the stocks at the end of each day, the allowed operations for compensating the positions and any balancing costs applied by the Storage Company and prescribed by the Resolution in order to incentivise the correct use of the purchased service on the part of the Shipper.

8.2 ALLOCATIONS

The Storage Company defines the Allocations, on the basis of the measurements of the total flows into and out of the Storage System and of the information received from the Major Transport Company in accordance with the procedure in force published on the Website of the Storage Company, apportioning them according to the criteria indicated below.

For each Gas-Day G, the equation pertaining to the Storage System is as follows:

$M = |\Delta G| + AC$ if the flow is injected

$M = |\Delta G| - AC$ if the flow is withdrawn

a) Daily measurement of the Gas flows from/to storage

The term M represents the measurement of the Gas flows to (or from) the Storage System obtained as the sum of the quantities injected (or withdrawn) by the Shippers into (or out of) the Storage System, at the virtual interconnection point corresponding to the storage hub.

b) Daily change in stored gas

The term $|\Delta G|$ represents the absolute value of the change in stored Gas, given by the difference between the total availability of the Gas present in the System referred to two successive Days.

c) Internal Consumption

The term AC represents the measurement of the Gas necessary for the operation of the treatment plants and for internal plant utilisation (internal consumption) and it is calculated as the sum of the values, in energy, of the internal consumption measured at each storage site; each value is obtained by multiplying the volume of gas attributed to internal consumption times the corresponding average daily PCS.

Edison Stoccaggio S.p.A calculates, for each site and at the aggregate level, the energy moved from/to the Storage System and transmits, for each Gas-Day G, to Snam Rete Gas the total measurement in GJ (term M) in order to enable Snam Rete Gas to close out the balance of the RNT and to determine the Overall System Imbalance (SCS) given by the difference between the aforesaid term M and the total Reformulations communicated to Edison Stoccaggio S.p.A. and as confirmed by the latter in accordance with Paragraphs 6.6.4 and 6.6.5.

8.2.1 Accounting for the gas moved from/to the Storage System by the Shipper

Edison Stoccaggio S.p.A, determines on a daily basis, for each Shipper, the term S_k (Allocation of the k-th Shipper on Gas-Day G at the virtual interconnection point corresponding to the storage hub) as the sum of:

$$S_k = SN_k + SM_k$$

where:

SN_k represents the quantity scheduled by the Shipper and confirmed by Edison Stoccaggio S.p.A in accordance with Paragraphs 6.6.4 and 6.6.5;

SM_k is the value pertaining to Edison Stoccaggio S.p.A. of the quantities selected within the PB-GAS Platform for the purposes of covering the

Total System Imbalance, as communicated by the Company in Charge of Balancing.
For the User of the Balancing Service for Transport Companies, this term is equal to zero.

8.2.1.1 Gas Accounting for the Shipper to whom Storage Capacity was assigned for only one of the Storage Services per this Code

For each Gas-Day G, Edison Stoccaggio S.p.A calculates the quantity of Gas held by each Shipper in the Storage System (G_k), starting from the quantity recorded for the previous Gas Day ($G\text{-}1_k$), according to the following equations as a function of the Prevalent Flow (FP_i) of the system as defined in Paragraph 6.6.6:

$S_k + ST_k - AC_k = G_k - G\text{-}1_k$ (1)
if FP_i coincides with the direction of the Injection phase

$S_k + ST_k + AC_k = G_k - G\text{-}1_k$ (2)
if FP_i coincides with the direction of the Withdrawal phase

where:

ST_k represents the total Gas exchanged with effect in Gas-Day G by the k-th Shipper (the term is positive if the k-th Shipper buys, negative if it sells),

AC_k represents the quantity of internal consumption charged to the k-th Shipper and calculated in accordance with Paragraph 8.3.

Until 31 March 2013, equation (1) shall be applied in case of reverse flow with respect to the withdrawal phase and equation (2) shall be applied for in-flow movements during the withdrawal phase.

8.2.1.2 Gas Accounting for the Shipper to whom Storage Capacity was assigned for both the Modulation Storage Service and for the Hydrocarbon Storage Service

If the k-th Shipper has capacities assigned both for the Hydrocarbon Storage Service and for the Modulation Service, Edison Stoccaggio S.p.A. shall calculate distinct stocks, according to the formula per paragraph 8.2.1.1 above. The change in stock relating to the Hydrocarbon Storage Service (ΔG_{SMin}) and the consequent stock relating to the Modulation Service are regulated according to the provisions set out below.

Injection

ΔG_{SMin} = $CI_{k,Min}$ if the term S_k (per this paragraph 8.2.1) has injection above $CI_{k,Min}$; in this case, the difference between S_k and $CI_{k,Min}$ shall be allocated to the Modulation Service;

ΔG_{SMin} = S_k if the term S_k (per this paragraph 8.2.1) has injection above $CI_{k,Min}$;

ΔG_{SMin} will be equal to zero if the Space assigned for the Service is reached

Withdrawal

ΔG_{SMin} = $CE_{k,Min}$ if the term S_k (per this paragraph 8.2.1) has Withdrawal above $CE_{k,Min}$; in this case, the difference between S_k and $CE_{k,Min}$ shall be allocated to the Modulation Service;

ΔG_{SMin} = S_k if the term S_k (per this paragraph 8.2.1) has
Injection below $CE_{k,Min}$;

ΔG_{SMin} will be equal to zero if the quantities of Gas available for the Service are exhausted; in this case, the term S_k will be entirely allocated to the Modulation Service.

The $CE_{k,Min}$ is deemed to include also the capacity assigned for back-up only in the cases prescribed by Article 2, Paragraph 2, Letter d) of the MSE Decree of 9 May 2001 and if it is supported by adequate certification by the Shipper, until the exhaustion of the Gas available for the Hydrocarbon Storage Service.
Moreover, in the case according to this paragraph, the Injection and Withdrawal consumption is attributed - for the purposes of determining stocks - proportionately to the Hydrocarbon Storage Service and to the Modulation Service as a result of the application of the previous apportionment in relation to the quantities of Gas allocated to the Shipper on a given Gas-Day G.

8.2.1.3 Gas Accounting for the Shipper to whom Storage Capacity was assigned for the Shipper Balancing Service

If the Shipper was assigned capacity for the Shipper Balancing Service and for one or more Storage Services per this Code (Hydrocarbon Storage and/or Modulation), to the Shipper Balancing Service will be allocated the residual allocation portion with respect to the quantities allocated for the Hydrocarbon Storage and Modulation Services and up to the available capacities for these Services

8.2.1.4 Guarantee storage gas in favour of the Company in Charge of Balancing

Starting from Thermal Year 2013-2014 and if an Authorised Shipper exercises the right per Article 11.6, Resolution ARG/gas/45/11, the Company in Charge of Balancing and the Storage Company will coordinate in order to verify the actual stock of the quantity of Gas proposed by the Authorised Shipper as a guarantee ("Guarantee Gas").

The Authorised Shipper who has asked the Company in Charge of Balancing to exercise the right per Article 11.6, Resolution ARG/gas/45/11 or access to the functionalities to increase or decrease the Guarantee Gas as prescribed by the Network Code of the Major Transport Company and has requested the establishment of a quantity of Guarantee Gas consisting of a portion of its own gas situated in the Storage System or an increase or decrease of said quantity shall submit to Edison Stoccaggio S.p.A., sending it in advance via fax, communication of the request or of the change in compliance with the time lines provided for this purpose by the Network Code of the Major Transport Company for the evaluation of acceptability of the Storage Company.

Edison Stoccaggio S.p.A will assess each request pertaining to the Guarantee Gas, verifying that there are no objectively critical situations prejudicing:

- the correct functionality of the Storage System, deriving from the constraint of the quantity of Guarantee Gas of the request
- the consistency between the amounts invoiced for the storage services assigned to the Shipper and not collected at the date of the request (invoices issued, received, any credit notes, including VAT) and the value of the guarantee issued to cover the obligations deriving from the contracts of the assigned storage services.

If one of the above conditions is met, Edison Stoccaggio S.p.A. shall notify, within one working day, the Company in Charge of Balancing and the Shipper that the Request is unacceptable, indicating any value of

Guarantee Gas that may be deemed acceptable as a result of a new request.

In this regard, in case of critical issues deriving from the inconsistency between invoiced amounts and guarantees issued to cover contractual obligations, Edison Stoccaggio S.p.A. shall consider unavailable for every request of every Shipper any portion of gas in storage, valued at a reference price equal to 100% of the last value of the component per Article 6 of the TIVG approved with Resolution ARG/GAS 64/09 as amended, necessary to reduce to zero the differential between the guarantees issued and the amounts invoiced and not collected as established by Article 16.4.4.
Instead, in the case of critical issues resulting from the correct functionality of the Storage System, Edison Stoccaggio shall deem unavailable, for every request of every Shipper, the share of gas obtained by applying to the total value deemed unavailable a pro-rata criterion with respect to all requests received.

The quantity of Guarantee Gas accepted by the Storage Company is declared pledged and unavailable by the Shipper and may not be used by the Shipper as from the date of acceptance of the proposed Agreement as prescribed by the Network Code of the Major Transport Company and throughout the validity of the Agreement. The quantity of Guarantee Gas, moreover, starting from the working day after the execution of the aforesaid Agreement, shall be deducted from the calculation of the maximum quantities for the sale bids per paragraph 8.8 below and shall be considered within the scope of the daily scheduling and reformulation processes per paragraph 6.6 above, after verification that the requested quantity is available to the Authorised Shipper.

In any case, Edison Stoccaggio S.p.A. shall report to the Company in Charge of Balancing the Shippers subject to the communication per Article 16.4.4 and the related quantities of gas that have become unavailable and unusable as Guarantee Gas. In addition, Edison Stoccaggio S.p.A. shall report to the Company in Charge of Balancing the Shippers who have not renewed the Storage Contract for at least one service and to each Shipper the quantity of Guarantee Gas that may not be utilised after the deadlines prescribed by Article 8.5 of this Code.
Equally, the Shipper undertakes not to stipulate any agreement and/or to terminate existing agreements with third parties relating to the Guarantee Gas with longer terms than the validity of the existing Contracts with the Storage Company.

Edison Stoccaggio S.p.A. shall include all gas quantities pledged as collateral in favour of the Company in Charge of Balancing or of the storage company itself in calculating the Shipper's Gas availability for:

i) verifying compliance with the Injection and Withdrawal profiles and the consequent application of the balancing costs;
ii) calculating the available Injection and Withdrawal Capacities;
iii) applying the price equal to 2xCVS in the prescribed cases.
iiii) applying the provisions of Article 15.14 of Resolution no. 119/05 and of Paragraph 5.4 of this Storage Code.

In the communications per this paragraph, the Authorised Shipper is also obligated to indicate the quantities of Guarantee Gas distinguished by type of Storage Service.

8.3 PROCEDURE FOR ATTRIBUTING INTERNAL CONSUMPTION IN THE INJECTION AND WITHDRAWAL PHASE

8.3.1 Foreword

Gas consumption relating to the treatment plants and for internal use within the plant for each Gas-Day G (internal consumption) shall be apportioned among all the Users of the Hydrocarbon Storage, Modulation and Shipper Balancing Services in accordance with the provisions of the present procedure.

8.3.2 Apportionment of Internal Consumption

The following is defined:

$$AC_{\%} = \frac{\sum_i AC_i}{\left|\sum_k S_k\right|}$$

Where:

AC_i = value in GJ of the Gas necessary for the operation of the treatment plants and for internal plant utilisation (internal consumption) reported for

Gas-Day G measured at the i-th storage site; each value is obtained by multiplying the volume of gas measured for internal consumption times the corresponding average daily PCS.

S_k = value of the Allocation of the k-th User of the Hydrocarbon Storage, Modulation and Shipper Balancing Service on Gas-Day G at the virtual interconnection point corresponding to the storage hub. The values of $S_{k,}$ are understood to be positive if they concur with FP_i and negative if they do not concur. Until 31 March 2013, the values of $S_{k,}$ are understood to be positive if they are consistent with the measured physical flow and deemed equal to zero for the purposes of the application of the above formula in the other cases.

The Storage Company allocates internal consumption of gas to cover the technical consumption for the operation of the treatment plants and for internal plant use in proportion to the total volume allocated to the Shipper according to the following criteria;

a) The Shipper who moved gas at the storage site in the same direction as FP_i shall be attributed an internal consumption AC_k equal to the percentage of $AC_{\%}$ relating to the direction of FP_i applied to the quantity of gas moved;

b) The Shipper who moved gas at the storage site in the opposite direction to FP_i shall be attributed a quantity AC_k of stored gas equal to the percentage of $AC_{\%}$ relating to the direction of FP_i applied to the quantity of gas moved;

The internal consumption of gas AC_U allocated to the u-th Shipper on day G shall be:

$$AC_k = S_k \times AC_{\%}$$

Until 31 March 2013, only letter a) shall be applied to Shippers who moved gas consistently with the physical flow of the System and letter b) shall not be applied.

8.3.3 Daily allocations

The Storage Company communicates no later than 11.30 am of each day to the Users of the service, in accordance with the procedures prescribed in Paragraph 4A.6 of the Annex “Times and Methods of Information Coordination”, the total quantities of Gas, expressed in GJ,

taking into account the pertinent internal consumption, moved on the System on the previous day.

Based on each Shipper's reservations and the data available up to that time, the Storage Company determines the Shipper's position in storage.
The Storage Company keeps a record of the gas moved daily for each Shipper, which it makes available to the Shipper, no later than 3 working days from the date of receipt of the request, containing the following information expressed in GJ:

a) Stock at the Start of the Thermal Year;
b) Stock at the end of the injection cycle;
c) Stock at the end of the month preceding the month of the request;
d) Daily amount withdrawn allocated in definitive form;
e) Daily amount injected allocated in definitive form;
f) Daily amount moved until the day prior to the day of receipt of the request;
g) Any other information necessary for the reconstruction of the stock such as exchanges/sales/transfers;
h) Internal Consumption.

The request shall be delivered to the Storage Company according to the procedures defined in Paragraph 4A.6 of the Annex "Time and Methods of Information Coordination".

8.4 BALANCING COSTS

To assure the balancing and replenishment of the System in case of use of capacities exceeding those committed, the Storage Company applies, as prescribed in the Resolution, the balancing costs listed below.

8.4.1 Minimum Injection Stock

If, according to the Allocations, at the end of the month M, the Shipper's G_{Uig} stock, calculated in accordance with Paragraph 8.2 of this chapter, is lower than the minimum stock defined by the utilisation profiles per the chapter "Description of the storage facilities and of their operation", the shipper may purchase quantities of gas through a sale of gas in accordance with paragraph 7.4 of the chapter "Capacity and gas

transactions", no later than fifteen days from the date of receipt of the data about its position, with any measurement errors corrected.
If the Shipper does not undertake the aforesaid action in such a way as fully to offset the measured difference, then to the difference, if positive, between the stock of the Shipper G_{UiM}, corrected to take into account the partial sales, and the aforesaid minimum stock shall be applied a price equal to 0.4 times the unit space price f_s, according to the following formula:

$$(G_{Ui,m} - S_{ik}*G_{min,m\%} + CG_U) * 0.4*f_s$$

where
CG_U represents the value of the sale carried out by the Shipper;
$G_{Ui,m}$ represents the stock allocated at the end of month M to the Shipper;
$S_{ik}*G_{min,m\%}$ is the minimum stock of month M deriving from the application of the utilisation profile of the capacities related to products with seasonal injection assigned at the start of the Thermal Year.

With regard, instead, to products with seasonal injection assigned after the start of the Thermal Year, which begin in month M, instead of the term $G_{min\%}$ the following ratio, published on the Website of the Storage Company, is applied:

$$G_{min,m\% \text{ infr}} = \frac{G_{min,m\%} - G_{min,m-1\%}}{G_{max,October\%} - G_{min,m-1\%}}$$

To the capacities related to monthly products that begin on month M, the term $G_{min,m\%}$ is set equal to 1 from month M until the last month of the injection phase.

For Shippers to whom Modulation Storage Capacity was allocated for multiple seasonal or monthly products, the stocks considered are those determined as the sum of the stocks calculated on the basis of the terms $G_{min,m\%}$, $G_{max,m\%}$, $G_{min,m\%infr}$, $G_{max,m\%infr}$, as published on the Website of the Storage Company.

8.4.2 Maximum Injection Stock

If, according to the Allocations, at the end of the month M, the Shipper's G_{Uig} stock, calculated in accordance with Paragraph 8.2 of this chapter, is higher than the maximum stock defined by the utilisation profiles per the chapter "Description of the storage facilities and of their operation", the

Shipper may sell the excess quantities of gas through a sale of gas in accordance with paragraph 7.4 of the chapter "Capacity and gas transactions", no later than fifteen days from the date of receipt of the data about its position, with any measurement errors corrected.
If the Shipper does not undertake the aforesaid action in such a way as fully to offset the measured difference and if, at the end of each month of the injection phase, the total stock of stored gas is greater than the one identified with reference to all users' utilisation profiles, then to the difference, if positive, between the aforesaid maximum stock and the stock of the Shipper G_{UiM}, corrected to take into account the partial sales, shall be applied a price equal to 0.2 times the unit space price f_s, according to the following formula:

$(S_{ik}*G_{max\%} - G_{Uim} - CG_U) * 0.2*f_s$

where
CG_U represents the value of the sale carried out by the Shipper
$G_{Ui,m}$ represents the stock allocated at the end of month M to the Shipper
$S_{ik}*G_{max,m\%}$ is the maximum stock of month M deriving from the application of the utilisation profile of the capacities related to products with seasonal injection assigned at the start of the Thermal Year.

With regard, instead, to products with seasonal injection assigned after the start of the Thermal Year, which begin in month M, instead of the term $G_{min\%}$ the following ratio, published on the Website of the Storage Company, is applied:

$$G_{max,m\%\ infr} = \frac{G_{max,m\%} - G_{min,m-1\%}}{G_{max,October\%} - G_{min,m-1\%}}$$

To the capacities related to monthly products that begin on month M, the term $G_{max,m\%}$ is set equal to 1 from month M until the last month of the injection phase.
For Shippers to whom Modulation Storage Capacity was allocated for multiple seasonal or monthly products, the stocks considered are those determined as the sum of the stocks calculated on the basis of the terms $G_{min,m\%}$, $G_{max,m\%}$, $G_{min,m\%infr}$, $G_{max,m\%infr}$, as published on the Website of the Storage Company.

8.4.3 Use of Gas for Strategic Storage purposes with authorisation by the MSE

In cases of authorisation to the use of strategic gas in accordance with current regulations, Edison Stoccaggio S.p.A. makes available the Strategic Gas owned to the Shipper who requests it, after the Shipper submits the documentation relating to obtainment of the authorisation to use additional storage capacity received by the MSE, and presents an adequate "autonomous, irrevocable and first-demand" bank guarantee issued by leading banks with a rating of at least BBB+ Standard & Poor or Baa1 Moody's Investor Service, to cover the amount due for the acquisition of the strategic gas and valued according to a price established by the authority for the period of the authorisation. As an alternative to the presentation of the bank guarantee, the previously authorised Shipper may decide to pay in advance the Strategic Gas made available by Edison Stoccaggio S.p.A.

For this purpose, Edison Stoccaggio S.p.A makes available on its own Website the forms for the submission of the request and of the autonomous, irrevocable, first demand bank guarantee issued by leading banks with a rating of at least BBB+ Standard & Poor or Baa1 Moody's Investor Service, as well as the procedures and terms for paying the amount described above. Requests that are incomplete or do not conform to the indications of Edison Stoccaggio S.p.A. shall not be considered acceptable.
The Strategic Gas shall be made available by Edison Stoccaggio S.p.A. to the Shipper (and accounted for among the latter's availability) starting from the day following receipt of the documentation described above if said documentation reaches the Shipper no later than 4 pm, or starting from a subsequent date if indicated by the Shipper.
The provisions of Resolution ARG/gas 45/11 shall apply in relation to the quantities of Strategic Gas made available to the Company in Charge of Balancing for the purposes of covering the Total Deviation of the System per the Network Code of SRG.
Subject to the provisions of Article 15, Paragraph 10 of Resolution no. 119/2005, Edison Stoccaggio S.p.A. shall reacquire and replenish the Strategic Gas previously used by the authorised Shipper only after receipt of the related payment or enforcement of the bank guarantee if the Shipper is in breach.

8.4.3.1 Storage capacity of the Shippers for Strategic Storage purposes with authorisation by the MSE

In cases of authorisation in accordance with current regulations, Edison Stoccaggio S.p.A makes available Storage Capacity to the Shipper who requests it, upon presentation by the Shipper of the documentation pertaining to the authorisation to use additional storage capacity received from the MSE, in accordance with procedures and terms made available by Edison Stoccaggio S.p.A. for this purpose on its own Website.
Requests that are incomplete or do not conform to the indications of Edison Stoccaggio S.p.A. shall not be considered acceptable.
The Storage Capacity shall be made available to the Shipper (and accounted for among the latter's availability) starting from the day following receipt of the documentation described above if said documentation reaches Edison Stoccaggio S.p.A. no later than 4 pm, or starting from a subsequent date indicated by the Shipper.

8.4.3.2 Exceeding the Withdrawal Capacity in the period to which the authorisation refers.

The Shipper authorised to withdraw Strategic Storage may use, within the limits of the previously authorised quantities and capacities, the volumes of stored gas available to it even above the limits prescribed by Paragraph 14.4 of Resolution AEEG 119/05.

8.4.3.3 Exceeding the Withdrawal Capacity in the period after the one to which the authorisation refers

For the remaining period of the Withdrawal Phase after the period to which the authorised use of Gas and of Withdrawal Capacity per the previous paragraph refers, Edison Stoccaggio S.p.A. shall calculate a Withdrawal Capacity (hereafter, calculated Withdrawal Capacity) on the basis of the provisions for the determination and publication of the profiles for the reduction of the Withdrawal Capacity, considering the peak withdrawal capacity that would have been available to the Shipper on the basis of a stock corresponding to the limits prescribed in Paragraph 14.4 of Resolution AEEG 119/05, or, if lesser, to the Shipper's stock increased by the authorised quantities.

8.5 WITHDRAWAL LOWER THAN STOCK

If at the end of the Withdrawal Period, the Shipper has not withdrawn 100% of the gas it owns, it shall pay to the Storage Company an amount

equal to double the CVS €/GJ multiplied times the quantity of gas not withdrawn, expressed in energy.

Moreover, if the Shipper does not renew a contract with the Storage Company for the next Thermal Year, it shall pay for quantities of gas in stock as at 31 March a price equal to f_s/5 and CVS applied to said stock.

If the Shipper does not free the occupied Space by 30 April, the Storage Company shall publish on its own Website the gas quantities owned by the Shipper and the methods for managing the competitive procedure for the sale of the aforesaid Gas excluding the quantities per Article 16.4.4 and including any Guarantee Gas. The sale price is set to 50 percent of the energy quota QE defined by the Authority for the same period.

The Storage Company shall pay the Shipper the revenue for the sale, net of the fixed amount of € 50,000.

8.6 PROCEDURE FOR THE APPORTIONMENT OF THE GAS QUANTITIES SUBJECT TO THE ACCEPTED BIDS ON THE BALANCING MARKET

The procedure for the determination of the gas quantities subject to the accepted bids on the Shipper balancing market defines the time line and the methods for managing the information flows between the parties, functional to the allocation of these quantities on the storage system in which Shippers have availability. This procedure is published at the Website of the Storage Company.

The Storage Company transmits to the Major Transport Company on a daily basis no later than 9 am the daily quantities injected or withdrawn from its own Storage System relating to the previous day.

The Major Transport Company communicates daily to the Storage Company no later than 11 am, for each of the users of the Transport Companies that have entered into storage contracts with the Storage Companies, the quantity of gas of each individual Shipper relating to the bids accepted on the balancing market:

a) The Major Storage Company allocates the entire value of each Shipper's gas quantity relating to the bids accepted on the balancing market communicated by the Major Transport Company

and the scheduled quantities for injection and withdrawal and the pertinent portion of internal consumption of gas to:

i. each Shipper that has entered into a contract solely with the major Storage Company.

b) The Major Storage Company, no later than 11.30 am, allocates each Shipper's gas quantity relating to the bids accepted on the balancing market, the scheduled quantities for injection and withdrawal and the pertinent portion of internal consumption of gas, to each Shipper that has entered into a contract solely with the Storage Company itself, as provided by the Storage Code.

c) The Storage Company allocates the daily volume to each shipper that has entered into a contract with the two storage operators according to the quantities scheduled for injection or withdrawal by each individual Shipper on its own Hubs, taking into account the pertinent share of internal consumption of gas, increased and/or reduced by the quantities of gas sold and/or purchased in the balancing session by the Shipper and pertaining to the Hub of the Storage Company. These quantities are determined on the basis of an operating procedure agreed among the involved operators (storage companies, RNG transport companies, GME) and published on the Website of the Storage Company.

d) The Major Transport Company, after obtaining from the Storage Company the Allocation values per points b) and c) above, makes available to its own Shippers the related definitive values allocated at the storage system of one or both Storage Companies.

8.7 MEASUREMENT AND ALLOCATION ADJUSTMENTS

Any measurement errors, both below and above the actual value, or deriving from the adjustments to the balance of the Major Transport Company, shall lead to the adjustment of the quantities of energy erroneously determined or allocated pertaining to the User of the Operational Balancing Service for transport companies.

In the case of verified errors, the Storage Company shall replace the erroneous value with the new corrected value.

Every month M, the Storage Company shall carry out, after revision of the measurements and/or allocations by the Major Storage Company, its own revision of the measurements and/or of the Allocations for month M-3, providing for the related invoice adjustments.

Once the aforesaid revision procedure is completed, the measurement values shall be communicated and considered definitive.

8.8 DETERMINATION AND PUBLICATION OF THE MINIMUM AND MAXIMUM LIMITS FOR THE OFFERS ON THE BALANCING MARKETS

No later than 7.30 pm of each Gas-Day G, simultaneously with the provisions of paragraph 6.6.4 above, the Storage Company makes available on Escomas the minimum and maximum limits for the purchase and sale bids on the balancing market for each Shipper, determined as described below:

1) For purchase availability
    a. The minimum quantities are equal to the lower value between the Space available for the Shipper on Gas-Day G, taking into account the quantities per paragraph 6.6.4 above, as confirmed by the Storage Company, and the total available Injection Capacity (continuous and interruptible confirmed) net of the quantities subjected to Reformulation in Injection or increased by the quantities subjected to Reformulation in Withdrawal, as confirmed by the Storage Company;
    b. The maximum quantities are equal to the Space available for the Shipper on Gas-Day G, taking into account the quantities subjected to Reformulation of the Capacities per paragraph 6.6.4 above on the same Gas-Day G, as confirmed by the Storage Company.
2) For sale availability
    a. The minimum quantities are equal to the Shipper's residual stock on Gas-Day G, taking into account the quantities per paragraph 6.6.4 above, as confirmed by the Storage Company, and the total available Withdrawal Capacity (continuous and interruptible confirmed) net of the quantities subjected to Reformulation in Withdrawal or increased by the quantities subjected to Reformulation in Injection, as confirmed by the Storage Company;

b. The maximum quantities are equal to the Shipper's residual stock on Gas-Day G, taking into account the quantities per paragraph 6.6.4 above, as confirmed by the Storage Company.

The maximum quantities for sale are calculated net of all gas quantities pledged as collateral in favour of the Company in Charge of Balancing or of the storage company itself per Paragraph 8.2.1.4 above and of the quantity per Paragraph 16.4.4 below. The minimum quantities for sale are calculated considering in the Shipper's availability all gas quantities pledged as collateral in favour of the Company in Charge of Balancing or of the storage company and the quantity per Paragraph 16.4.4 below.

Starting from thermal year 2013-2014, Edison Stoccaggio S.p.A. annually communicates on its own Website the maximum values of the internal consumption recorded in the previous thermal year in GJ for the Injection phase and for the Withdrawal phase.

For purchase availability, the maximum quantities are:

- increased by a quantity corresponding to the maximum Injection consumption per the above paragraph and increased by 30% if the prevalent estimated flow for the Gas day shows an Injection;
- decreased by a quantity corresponding to the maximum Withdrawal consumption per the above paragraph and increased by 30% if the prevalent estimated flow for the Gas day shows a Withdrawal.

For sale availability, the maximum quantities are:

- decreased by a quantity corresponding to the maximum Withdrawal consumption per the above paragraph and increased by 30% if the prevalent estimated flow for the Gas day shows a Withdrawal
- increased by a quantity corresponding to the maximum Injection consumption per the above paragraph and increased by 30% if the prevalent estimated flow for the Gas day shows an Injection.

Until 31 March 2013, no increase or decrease shall be applied to the maximum quantities both for purchase and sale.

For Shippers who have subscribed to one or more Storage Services per this Code (with the exception of the Users of the Balancing Service) the

maximum and minimum limits shall be determined considered the stock and the total Space, Injection and Withdrawal Capacities.

8.9 ESTIMATE OF THE CHARGES TO COVER THE ELECTRICITY CONSUMPTION NECESSARY FOR THE OPERATION OF THE COMPRESSION AND TREATMENT PLANTS

Starting from thermal year 2013-2014, the Storage Company annually defines with reference to the storage set-up forecast in the following year and to the available historical data the estimate of the charges to cover electricity consumption in MWh necessary for the operation of the compression and treatment plants, relating only to the movements in the expected direction of the prevalent flow of the system (FPi).
In detail, Edison Stoccaggio S.p.A. publishes no later than 1 March a table with monthly detail containing the indication of the correlating factor between moved GJ and expected MWh based on the historical series of the previous year. No later than the end of each month, Edison Stoccaggio S.p.A shall disclose to its shippers the estimate of the price in €/MWh expected for the following month in such a way as to provide the values useful to estimate the charges to cover the costs of electricity.
The procedures for apportioning the charges to shippers are defined in Chapter 16 A.

8.10 PRICES FOR THE STORAGE SERVICES

The Shipper must pay Edison Stoccaggio S.p.A., for the performance of the services, the amounts deriving from the application of the prices published by Edison Stoccaggio S.p.A. on its own Website, and structured as follows:

f_S (€/GJ/year)
US_1, US_2 (€/GJ/year)
CM^S (€/GJ/year)
f_{PE} (€/GJ/day)
f_{PI} (€/GJ/day)

CVS (€/GJ)

The Space price f_S, and the components US_1, US_2 and the transitional price for the measurement service CM^S, are applied, on an annual basis, to the Space assigned to the Shipper for the Thermal Year, for the Hydrocarbon Storage Service, Modulation Service and/or Balancing Service for Transport Companies, updated to take into account any assignments during the Thermal Year and/or transfers of capacity or sales of capacity.

The price for the daily peak availability for Withdrawal f_{PE} is applied, on an annual basis, to the Withdrawal Capacity assigned on a continuous basis to the User of the Hydrocarbon Storage Service, of the Modulation Service and/or Balancing Service for Transport Companies, updated to take into account any assignments during the Thermal Year and/or transfers of capacity or sales of capacity with the following differentiation:

- f_{PE} to the minimum Withdrawal Capacity;
- f_{PE} to the Withdrawal Capacity for the Balancing Service for Transport Companies
- f_{PE} x 2 to the additional Withdrawal Capacity;
- f_{PE} to the Withdrawal Capacity assigned (baseline and “back up”) for the Hydrocarbon Storage service

The price for the daily peak availability for Injection f_{PI} is applied, on an annual basis, to the Injection Capacity assigned on a continuous basis to the User of the Hydrocarbon Storage Service, of the Modulation Service and/or Balancing Service for Transport Companies, throughout the duration of the Thermal Year, updated to take into account any assignments during the Thermal Year and/or transfers of capacity or sales of capacity.

The movement price CVS applies to each GJ of Gas moved taking into account the portion of internal consumption and multiplied times a coefficient of 1 for the quantities moved in the direction concurring with the direction of prevalent flow (FP_i) per Paragraph 6.6.6 and times a factor of -1 in the opposite case.
In accordance with Resolution no. 85/2014 for thermal year 2014/2015 the price CVS is set to zero for all storage services.

For thermal year 2014/2015, for Users of the Modulation Service the prices fpi and fpe are set to zero. To the space assigned as a result of each competitive procedure, instead of the price fs, the assignment price, determined as a result of the related competitive procedure, will be applied.

In addition to the prices listed above, the Storage Company shall determine, on a monthly basis, the portion of the total transport capacity price due to the Major Transport Company pertaining to each Shipper. Said portion, referred to the inlet/outlet point of the transport network interconnected with the Storage System, is proportional to the maximum Withdrawal/Injection capacity assigned to each Shipper in the month in question. In the calculation of the portion, the Storage Company shall take into account the sales and transfers of capacity per Chapter 7 or purchases or sales for the Shipper Balancing Service.

In particular, for the purposes of determining the definition of the maximum Withdrawal/Injection capacity, the criteria per Paragraph 17.1.2 of this Code shall be applied.
Moreover, the costs for transport capacity consequent to sales or transactions of Withdrawal capacity and/or of continuous Injection capacity both in accordance to Chapter 7 and sold or purchased between Shippers in the Shipper Balancing Service sessions shall be charged to the buying Shipper and detracted from the selling Shipper applying a “per diem” criterion with respect to the period of the transfer/transaction or sale.

Moreover, for the purposes of the coverage of the transport costs associated to the outlet points interconnected with the storage and the related unit price is applied, both for the modulation service with seasonal injection and for the modulation service with monthly injection, to the quantity of gas q_u relating to the unit of space, defined as follows:

$$q_u = \frac{CI_u}{CI_t} * PI_{max} \quad [GJ/g]$$

where:

CI_u is the injection capacity assigned to the shipper u;
CIt is the injection capacity associated to the set of space capacities for the modulation service;
PI_{max} is the total injection performance at the start of the thermal year for the modulation service.

The value of q_u relating to the unit of space is published at the Website of the Storage Company before the start of the competitive assignment procedures.

Moreover, for the purposes of the coverage of the transport costs associated to the outlet points interconnected with the storage and the related unit price is applied to the quantity of gas q_e relating to the unit of space, defined as follows:

$$qe = \frac{\mathrm{CE_u}}{\mathrm{CE}_t} * PE_{max} \quad [\mathrm{GJ/g}]$$

where:

$\mathrm{CE_u}$ is the withdrawal capacity assigned to the shipper u;
CE_t is the withdrawal capacity associated to the set of the storage capacity for the modulation service;
PE_{max} is the total withdrawal performance at the start of the withdrawal phase.

The value of q_e relating to the unit of space is published at the Website of the Storage Company before the start of the competitive assignment procedures.

The Storage Company shall recognise in favour of the Shipper the amounts that should arise from the application of the above provisions in accordance with the provisions of Paragraph 16.4.1.

CHAPTER 9

GAS MEASUREMENT

9.1 FOREWORD

To determine the volume of natural gas injected and withdrawn, the Storage Company installs measuring systems directed at measuring the volumes and their energy equivalent expressed in multiples of Joules (J); the Storage Company takes the measurement as provided by Article 23 Paragraph 1 of the Ministerial Decree of 26 August 2005 and in accordance with Article 7 Paragraph 4 of Annex A to Resolution AEEG 185/05.

The chapter briefly describes the principles and the different methods for measurement that can be used, with a very brief description of the facilities and of the obligations relating to the management. The reference regulatory provisions and the methods for measuring and monitoring quality parameters are discussed in Chapter 10.

9.2 GENERAL PRINCIPLES OF GAS MEASUREMENT

Some general principles, necessary for the correct performance of the measurement activity carried out by the Storage Company, can be summarised as follows:

a) The measurement of the Gas is expressed in terms of volume and/or energy;
b) The unit of measure of volumes is the cubic metre at the reference conditions of temperature and pressure, respectively of 15 °C and 1.01325 bar;
c) The quantity of energy is obtained multiplying Gas volumes times the Higher Heating Value (HHV) of the Gas. The composition of the Gas and the related chemical-physical parameters are determined by the Storage Company as indicated in Chapter 10 “Gas Quality”;
d) The Storage Code refers to the most recently promulgated legislative, technical and metrological rules. The time line for the adoption of new rules shall be the one that may be prescribed by those rules;
e) The technique used to measure the flow rate and the volumes of Gas in the current measurement stations of the Storage Company is with venturi flow meter by means of calibrated diaphragm;
f) The measuring stations at the storage sites are designed, built and operated by the Storage Company in accordance with the provisions of current legal metrology regulations;
g) The Storage Company transmits the documentation about the measurement system to the competent UNMIG, which verifies the correct construction and operation, prescribing, if the case warrants, any actions to be taken by the company, informing the Ministry of Economic Development thereof.

9.3 DEVICES FOR DETERMINING THE MEASUREMENT

The measurement systems installed in storage facilities can be:

1. of a traditional type;
2. of an automated type.

Traditional measurement systems use a calibrated diaphragm inserted between appropriate orifice metres on a venturi measurement line; it is connected to a mechanical recorded called “thermomanometer-triplex” which records on graph paper the values of differential pressure, relative pressure and operating temperature of the measured gas.
In automated measurement systems, the regulatory body (UNMIG) competent for the approval and verification of the aforementioned instrumentation, allows the addition, to the traditional instrumentation per the preceding paragraph, of a flow computer that, on the basis of the parameters provided by the venturi diaphragm, automatically and continuously computes both flow rates and volumes and use of the processed data for fiscal purposes.

In the measurement with venturi diaphragm, the primary parameters in the formula for calculating flow rates/volumes are:

a) diameter of the orifice;
b) inner diameter of the venturi measurement trunk;
c) differential pressure upstream and downstream of the orifice;
d) operating pressure and temperature;
e) volume mass;
f) coefficient grouping the conversion constants of the units of measure and the compressibility and outflow coefficients.

The measuring systems currently installed in storage facilities comprise differentiated measuring lines for Withdrawal and Injection and automated measuring devices that provide the daily volumes and the monthly aggregates through the use of a flow computer.

During Injection, the Gas made to be delivered from the Transport Company to the Storage Company is measured downstream of the gas outlet used to measure consumption.

During Withdrawal, the Gas returned to the Transport Company by the Storage Company and injected into the RNG is measured upstream of the gas outlet used to measure consumption.

In addition, the installed measuring systems enable to determine the volumes that transited, in energy, by means of a gas chromatograph that continuously sends the current value of PCS to the fiscal calculators that multiply it times the transited volume in Smc.

The gas volumes consumed for the purposes of physically moving the Gas in the System attributed to Shippers in accordance with the procedure indicated in Paragraph 8.2 of the chapter “Balancing and replenishment of the storage sites” can be classified in two categories: Gas consumed continuously (by the incinerator, by the dehydration plant and gas consumed for adjustments); gas consumed only in case of operations on the plants (e.g., well purging and compressor washing). Whilst the former are measured with a dedicated system and normally represent 100% of consumption allocated to Shippers, the latter are calculated or estimated only if necessary.

9.4 VALIDATION OF MEASUREMENT DATA

Measurement data are validated verifying the completeness, accuracy and truthfulness of the data processed by the measurement system and the absence of anomalies that could compromise their validity.

The validation procedure, carried out at the end of every Gas-Day, comprises two phases:

a. Validation of the measurement data in each operating site, where the measuring systems are installed, verifying the correct operation of the installed measurement facilities and the consistency of the data produced. If a malfunction of the measuring system is noted, the daily data used for commercial purposes will be those of the back-up system, as defined in the following paragraph 9.5 of this chapter.
   The person in charge of the individual operating site, following the control activities, certifies the daily data of Volume, PCS and Energy.
b. Validation of the measurement data in the operating site, where the consistency and completeness of the values is verified at the Storage System level, where the data coming from all the measuring system of the Storage Company are collected and entered into the information system. Once this phase is completed, the data are deemed by the Storage Company to be usable for the performance of the accounting activities involving the gas injected/withdrawn on a daily basis within the times defined with the Major Transport Company.

9.5 DETERMINATION OF THE QUANTITIES IN CASE OF ANOMALY OF THE MEASURING SYSTEM

In case of fault or anomaly of one or more instruments comprising the main measuring system, the computation of the quantities is assured by the back-up system operating in parallel. The equipment of this system, installed on each measurement line, is regularly checked to verify its correct calibration and proper operation.
The timelines defined with the Major Transport Company for the transmission of the measurement data necessary for daily balance are maintained and adhered to even when using the back-up system. If faults or anomalies are observed in both systems (main and back-up), a measurement figure is estimated with the agreement of the transport company.

9.6 MANAGEMENT AND MAINTENANCE OF MEASURING SYSTEMS

The measuring system is installed in the Plant and it is the property of the Storage Company, which manages it. The verification of the efficiency and the maintenance of the facilities are outsourced to specialised firms, and they are carried out on a half-yearly basis, in accordance with the provisions of the competent UNMIG.

9.7 PRODUCTION RECORD

The analogue or digital recordings of the daily measurements are kept available for the competent UNMIG, under the care of the Storage Company, for a period of five years starting from the conclusion of each storage cycle.

9.8 CHECKS AND INSPECTIONS

Periodically, at the request and in the presence of the officials of the competent UNMIG, checks are carried out to verify that the volumes moved in storage are correctly accounted for.
As indicated in subparagraph 8.2.2 of the chapter “Balancing and storage replenishment”, the Storage Company communicates to Shippers, on a weekly basis, the total quantities of Gas, expressed in GJ, moved on the System in the previous week.

The Shipper, upon written request to the Storage Company and with procedures agreed with it, may be present at the operations carried out at the facilities with impact on the measurement data obtained.

CHAPTER 10

GAS QUALITY

10.1 FOREWORD

The chapter describes the requirements for the quality of the storage Gas to be injected and withdrawn, to allow the interoperability of the storage facilities with the connected transport system.
The chapter also describes the procedures adopted to ascertain the quality of the Gas and to validate the measurements.
The chapter lastly specifies the procedures for determining the higher heating value in the injection and withdrawal points.

To assure the Integrity and security of the System and interoperability with the RNG, the Storage Company shall adhere, with regard to Gas quality, to the provisions of Resolution no. 185/05 by the Authority, as amended, and to the prescriptions of the Bill; moreover, to ascertain the quality of the gas and to validate the measurements of the quantities injected and withdrawn from the storage sites of Collalto and Cellino, the Storage Company uses directly operated facilities owned by it.

10.2 GAS QUALITY PARAMETERS

The parameters that characterise Gas quality can be subdivided among the chemical-physical parameters necessary to calculate energy (Higher Heating Value) and check the quality specification of the Gas.

10.3 THE QUALITY SPECIFICATIONS

The chemical-physical characteristics of the Gas injected into and withdrawn from the System shall comply with the values defined in Annex 10A.

10.4 DETERMINING PARAMETERS FOR ASCERTAINING QUALITY

The parameters for checking conformity with the quality specifications are determined at the Gas Delivery and Redelivery Points at the inlet and outlet of the Storage Company’s Facility.

10.4.1 The parameters for calculating energy (components of the HHV)

The fundamental chemical-physical parameter for calculating energy is the Higher Heating Value (HHV), determined in compliance with ISO 6976 on the basis of the chemical composition of the Gas, taking into account at least the following elements:

1. Methane – C_1
2. Ethane – C_2
3. Propane – C_3
4. IsoButane – iC_4
5. Normal Butane – nC_4
6. IsoPentane– iC_5
7. Normal-Pentane – nC_5
8. Hexanes and higher – C_6^+
9. Nitrogen – N_2
10. Carbon Dioxide – CO_2

10.4.2 Quality control parameters

The Gas quality control parameters, assuring the interchangeability and safety of the storage facilities and of the transport system, are as follows:

1. Higher Heating Value
2. Relative density
3. Wobbe Index
4. Carbon Dioxide – CO_2
5. Oxygen – O_2
6. Hydrogen sulphide – H_2S
7. Mercaptan sulphur – S_{RSH}
8. Total sulphur - S_{tot}
9. Water Dew Point
10. Hydrocarbon dew point

10.4.3 Management of out-of-specification Gas

It is prohibited to deliver to the System, or to redeliver on the transport network, any Gas that does not meet the specifications set out in Annex 10A, or that, though meeting these specifications, contains elements that are normally not present in natural gas in quantities that may harm shippers.

Therefore, the quality of the Gas the Shipper delivers or causes to be delivered to the Storage Company at the Delivery Point and the Gas the Storage Company redelivers to the Redelivery Point, shall meet the specifications defined in Annex 10A.

Subject to the provisions of Resolution no. 185/05 by the Authority, if the Quality Specification is not met or if Gas is injected which, while not out of specification, nonetheless contains elements that are normally not present in natural gas in quantities that may harm Shippers, the provisions of Paragraph 17.2 of the Chapter "Responsibilities of the Parties" shall apply.

10.4.4 Methods for determining the parameters

The "energy" and quality parameters are determined by the Storage Company in compliance with the obligations per Resolution no. 185/05 as amended.

The HHV components listed in the Quality Specification are measured through facilities set up for this purpose, consisting of the set of quality measurement equipment and of the ancillary services necessary for their operation.

At the storage sites of Collalto and Cellino, the energy parameters and some gas quality parameters (HHV, relative density, Wobbe index and carbon dioxide) are determined by means of a gas chromatograph that continuously sends the value of HHV to the fiscal calculators which multiply it times the transited volume, calculating its value in energy.

At the Collalto site, the water dew point and the hydrocarbon dew point are determined continuously with suitable analysers; at the Cellino site, only the water dew point is determined continuously; the hydrocarbon dew point is determined on a monthly basis, with measurement on a spot day.

For both sites, the oxygen, hydrogen sulphide, mercaptan sulphur and total sulphur content is determined, with monthly periodicity, through the laboratory analysis of an instantaneous sample.

The instantaneous gas sample refers to UNI EN ISO 10715 "Natural gas - Guidelines for sampling" with regard to the sampling line, control of the filling process and the traceability of the tank. This gas sample is subsequently subjected to gas chromatographic analysis in a SINAL or SIT certified laboratory.

10.5 VALIDATION OF QUALITY DATA

The data of the composition and quality of the Gas provided by gas chromatographs and the "instantaneous" samplers are deemed valid for the purposes of calculating the HHV according to the provisions of Resolution no. 185/05 as amended and on the basis of the following criteria:

a) Acquisition and review of the data coming from each gas chromatograph and from the chemical analysis carried out in a laboratory on the drawn sample of gas;
b) Comparison with the data of the previous gas chromatographic analyses and with the results of the chemical analyses relating to the Gas samples drawn previously;
c) Consistency of the analysis data;
d) Concentration limit values obtained from the range of historical values;
e) Gas chromatographs are subjected to periodic calibration for precision control, in accordance with current laws and pertinent technical regulations or, if they are incomplete, in accordance with the technical file prepared by the manufacturer.

10.6 OPERATIONAL AND FISCAL VALUES

For the purposes of the Allocation and of the subsequent invoicing, the value of HHV used is the one acquired, computed and validated by the Storage Company.
In particular, thanks to the presence of a gas chromatograph operating both on the injection measurements and on the withdrawal measurements, the HHV of the transited gas is measured continuously, and consequently not just the volumes in Standard cubic meters are measured, but also their energy equivalent in Giga Joule.
For the purposes of fiscal invoicing, the valid figure is the one acquired, computed and validated by the Storage Company.

A copy of the quality report is sent to the Transport Company each month.

10.7 REQUEST FOR VERIFICATION BY THE SHIPPER

The Shipper may request the Storage Company to verify the data in question, indicating:

a) The involved storage site;
b) The figure to be verified and the reference period;
c) Other technical elements supporting the request.

The Storage Company, on the basis of the above elements and/or of other elements that it may become necessary to request, carries out, if it falls within the scope of its responsibilities per this chapter, the appropriate tests and assessments within the time strictly necessary to carry out the activities.

As soon as available, the results of the tests in question are communicated to the requesting shipper.

If the tests demonstrate the correctness of the reported data, the Storage Company shall charge back to the requesting shipper the costs incurred for the test.

ANNEX 10A

TECHNICAL SPECIFICATION ON THE CHEMICAL-PHYSICAL CHARACTERISTICS OF NATURAL GAS

10A.1 COMPONENTS OF THE HHV

The components of Natural Gas used for the purposes of measuring HHV are listed below.

Component	Acceptability values	Unit of measurement
Methane	(*)	
Ethane	(*)	
Propane	(*)	
Iso-butane	(*)	
Normal-butane	(*)	
Iso-pentane	(*)	
Normal-pentane	(*)	
Hexanes and higher	(*)	
Nitrogen	(*)	
Carbon Dioxide	≤ 3	%mol

(*) for these components, the values of acceptability are intrinsically limited by the range of acceptability of the Wobbe Index.

10A.2 QUALITY CONTROL PARAMETERS

Parameters	Acceptability values	Unit of measurement
Hydrogen sulphide	≤6.6	mg/Sm3
Mercaptan sulphur	≤15.5	mg/Sm3
Total sulphur	150	mg/Sm3
Higher Heating Value	34.95÷45.28	MJ/Sm3
Wobbe Index	47.31÷52.33	MJ/Sm3
Relative density	0.5548÷0.8	
Oxygen	< 0.6	% mol
Water dew point (a)	≤-5	°C
Hydrocarbon dew point (b)	≤0	°C
Max Temperature	≤50	°C

(a) at the pressure of 7,000 kPa
(b) in the pressure range 100÷7000 kPa

10A.3 OTHER PROPERTIES

Under operating conditions, the Gas shall not contain traces of the components listed below:

a) Water and hydrocarbons in liquid form;
b) Solid particulate in such quantities as to harm the materials used in transporting gas;
c) Other elements that may affect the safety or integrity of the transport system.

10A.4 REGULATORY REFERENCES

a) CNR-UNI 1003 “International System of Units (SI)”;
b) Ministerial Decree of 24 November 1984 “Fire prevention safety regulations for transportation, distribution, accumulation and utilisation of natural gas with density no greater than 0.8”;
c) UNI EN 437 “Test gases - Test pressures - Categories of appliances”;
d) ISO 13443 “Natural gas – Standard reference conditions”;
e) Authority Resolution no. 185/05 of 6 September 2005;
f) Decree of 19 February 2007, “Approval of the technical rule on the chemical-physical characteristics and on the presence of other components in fuel gas to be conveyed”.

10A.5 REFERENCE CONDITIONS

The reference conditions of the unit of volume adopted herein are the standard ones, i.e. (see ISO 13443):

Pressure	*101.325 kPa*
Temperature	*288.15 K (= 15°C)*

For the determination of the Higher Heating Value and of the Wobbe Index, the following enthalpic reference is assumed:

288.15 K (= 15°C) ; 101.325 kPa

CHAPTER 11

INJECTION AND WITHDRAWAL PRESSURES

11.1 FOREWORD

Pressure is a fundamental parameter for the performance of the service and for the interoperability of the storage facilities with the connected transport system. Therefore, it is fundamental for the Storage Company to be able to refer to appropriate pressure values at the points of injection of the system.

11.2 PRESSURE AT THE DELIVERY POINTS

Shippers shall deliver or cause to be delivered the gas to the Delivery Point at the Minimum Contractual Pressure, which the Storage Company is entitled to request at any time. The Minimum Contractual Pressure identifies the value of pressure below which the daily performance could be interrupted altogether.

To manage storage efficiently, the Storage Company determines the injection performance made available to shippers referencing a value of Average Contractual Pressure, which may be higher than the Minimum Contractual Pressure. The Average Contractual Pressure identifies the value of pressure below which the daily performance of the System could be reduced. Any reductions in performance consequent to a gas delivery at a pressure level between the Minimum Contractual Pressure and the Average Contractual Pressure are subject to the balancing Service and therefore they do not entail any change to the Shipper's performance.

The value of the Average Contractual Pressure is assessed jointly with the transport company owning the connected gas pipeline and it is estimated on the basis of the average values of delivery pressure expected during the injection cycle under conditions of normal operations of the connected pipeline. The Average Contractual Pressure is defined through statistical analysis of historical data and considering constraints and set-up changes that may occur in the Thermal Year when the Average Contractual Pressure is in force.

In operational practice, the Storage Company may accept gas at a lower pressure than the Average Contractual Pressure and such acceptance will not require any specific communication, nor will it be prejudicial for the Storage Company to require its restoration.

The Minimum Contractual Pressure and the Average Contractual Pressure are subject to an agreement with the Transport Company that owns the RNG connected to the system.

Each year the Storage Company shall publish on its own Website, in concurrence with the publication of the information and of the timelines on the cycle of assignments, the Average Contractual Pressure and the Minimum Contractual Pressure.

For the Shipper's failure to comply with the pressure constraint, please refer to Paragraph 17.2 of the Chapter "Responsibilities of the parties".

11.3 PRESSURE AT THE REDELIVERY POINTS

The Storage Company undertakes to redeliver the gas at the value of Minimum Contractual Pressure at Redelivery Point which the Shipper has the right to require at any time. This value may not exceed the maximum value of operating pressure of the natural gas pipeline connected to the System.

In operational practice, the Storage Company normally redelivers the Gas at the operating pressure of the pipeline connected to the System, without prejudice to the Shipper's right to have the minimum contractual level requested from the Transport Company.
The Minimum Contractual Pressure is subject to an agreement with the Transport Company that owns the RNG connected to the system.

Each year the Storage Company shall publish on its own Website, in concurrence with the publication of the information and of the timelines on the cycle of assignments, the Minimum Contractual Pressure at Redelivery Point.

CHAPTER 12

QUALITY OF SERVICE

12.1 FOREWORD

The Storage Company intends to provide a high standard of quality in the performance of the Storage service, guaranteeing to Shippers an adequate level of safety, reliability and environmental protection, through the use of the best available techniques.

12.2 FUNDAMENTAL PRINCIPLES

The Storage Company, in performing its characteristic activity, adheres to the following fundamental principles:

12.2.1 Flexibility

The Storage Company intends to perform its activity in favour of the Shipper in accordance with the principle of the greatest available flexibility, in compliance with the provisions of the law, with the principles expressed by this Code and, in particular, with the fair and non-discriminatory treatment of all Shippers.
A practical example of flexibility is the possibility for the Consultation Committee to submit proposals for revising the Code in any period of the Thermal Year, as described in Paragraph 20.4 of the Chapter “Revision of the Storage Code”.

12.2.2 Impartiality of treatment

The Storage Company assures equal treatment and non-discrimination for all its Shippers. This Code is one of the main instruments to secure these objectives.

12.2.3 Service efficiency

The Storage Company identifies the technological, organisational and functional solutions that ensure that the service provided matches as closely as possible the requirements of the market.

12.2.4 Continuity

The Storage Company's commitment to the Shipper is to provide a continuous, regular service and therefore to minimise service interruptions, promptly communicating them to the involved Shippers and striving to restore normal operating conditions as quickly as possible.

12.2.5 Health, safety and environment

The Storage Company is constantly engaged in improving both the safety of its facilities and of persons and the protection of the environment. This effort is not limited to the application of suitable maintenance schedules but also entails periodically inspecting and monitoring the facilities.

12.2.6 Participation

Shippers, Transport Companies and the main trade associations involved have been invited to participate in the Consultation Committee to contribute to drafting the Code and to propose the revisions deemed most appropriate, in accordance with the provisions of Chapter 20 "Revision of the Storage Code".

12.2.7 Information

The Storage Company makes a constant effort to provide the Shipper with the best support in understanding the activities regulated by the Storage Contract and hence by the Code; in this sense, it prepares communications to the Shipper in such a way as to best express assumptions, objectives and results.
Moreover, the Shipper, as the counterparty, is entitled to ask for information about its own Storage Contract (for example: its own administrative-accounting situation, the procedures for calculating the Allocations, the exchange of information about itself with the Major Company and the other operators, etc.).

12.3 AREAS OF INTERVENTION

The Storage Company has defined indicators of the commercial and technical quality of the service and has associated specific and general quality standards to them, in order to provide Shippers with a safe and reliable service, adhering to the principles described above.

12.3.1 Commercial quality standard

In defining guaranteed standards of quality of service relating to the commercial factors, reference is made to the following indicators:

1. Deadline for the reply to the Shipper on its position in storage;
2. Deadline by which the Storage Company carries out the new Allocations, after the sales of gas and/or Capacity by the Shippers for balancing.

In defining general standards of quality of service relating to the commercial factors, reference is made to the following indicator:

3. Minimum percentage of compliance with the deadline by which the Storage Company communicates the values to be allocated to Shippers having availability at its own Storage System.

12.3.1.1. Deadline for the reply to the Shipper on its position in storage

The Storage Company keeps a record of the gas moved daily for each Shipper, which it makes available to the Shipper, in the times and according to the procedures indicated in subparagraph 8.2.1 of the chapter “Balancing and replenishment of the storage sites”.

12.3.1.2. Deadline by which the Storage Company carries out the new Allocations, after the sales of gas and/or capacity by the Shippers for balancing.

The deadline by which the Storage Company carries out new Allocations, after the sales of gas and/or capacity by the Shippers for balancing, is the day by which the Storage Company makes the new Allocations available to the Shippers as provided in Paragraph 8.5 of the chapter “Balancing and replenishment of the storage sites”.

12.3.1.3. Minimum percentage of compliance with the deadline by which the Storage Company communicates the Allocations on the basis of the definitive transport balance

The minimum percentage of compliance with the deadline by which the Storage Company communicates the Allocations to each Shipper having availability at its own

Storage System, after the transmission of the definitive balance of the Major Transport Company, is the percentage of compliance of the Storage Company with the deadline indicated in Paragraph 8.6 of the chapter “Balancing and replenishment of the storage sites”.

12.3.2 Technical quality standard

In defining guaranteed standards of quality of service relating to the technical factors, reference is made to the following indicator:

1. Maximum duration of the maintenance operations for the Storage System.

12.3.2.1. Maximum duration of the maintenance operations for the Storage System.

The maximum duration of the maintenance operations for the Storage System is the number of days per Thermal Year in which the Storage System undergoes maintenance operations that cause a total interruption of the Storage Capacity.

The guaranteed and general quality standards for the indicators described are stated in Annex 12 A.

The Storage Company monitors the standards per Annex 12 A and it communicates to the AEEG, no later than 30 June of each year, the information and data about trends in the aforesaid standards during the previous Thermal Year.

ANNEX 12A

STANDARDS OF QUALITY OF SERVICE

12A.1 COMMERCIAL QUALITY STANDARDS

Guaranteed commercial quality standards:

INDICATOR	GUARANTEED STANDARD
Deadline for the reply to the Shipper on its position in storage.	No later than 3 working days from receipt of the request.
Deadline by which the Storage Company carries out the new Allocations, after the sales of gas and/or capacity by the Shippers for balancing.	No later than 5 working days from the deadline for transmission of the sale notices.

General commercial quality standards:

INDICATOR	GENERAL STANDARDS
Minimum percentage of compliance with the deadline by which the Storage Company communicates the Allocations on the basis of the definitive transport balance.	95%

12A.2 TECHNICAL QUALITY STANDARDS

Guaranteed technical quality standards:

INDICATOR	GUARANTEED STANDARD
Maximum duration of the maintenance operations for the Storage System with total interruption of the Performance.	7 working days per year.

CHAPTER 13

SCHEDULING AND MANAGING MAINTENANCE OPERATIONS

13.1 FOREWORD

This chapter describes the procedures whereby the Storage Company schedules and communicates maintenance, flow regulation, enhancement and development operations on the storage facilities in order to assure efficient and safe management of the activities.
In scheduling works of any nature, the Storage Company adopts as a general criterion the minimisation of the impact on the performance made available to Shippers. In this sense, in fact, it engages to make periodic reservoir inspections coincide with those of the surface facilities, and it concentrates these operations during the periods when the required performance is minimal.
In particular, it assumes to carry out the periodic inspection operations on the facilities and the reservoir at the end of the Injection Period and of the Withdrawal Period, whereas the schedules of the Significant Maintenance Operations, as defined in paragraph 13.2 below, and their impacts, are considered among the input data of the definition of available storage capacities as indicated in Chapter 2.

In the paragraphs below, only the operations that entail more or less significant changes to the performance of the storage facilities will be considered.

13.2 TYPES OF OPERATIONS

The aforementioned maintenance operations are classified according to the following categories:

1. Obligations by Law;
2. Functional inspections of the facilities;
3. Flow regulation, enhancement and development works;
4. Restoration work following service emergencies;
5. Interference with third-party works;
6. Other works.

The aforementioned type 3, 4, 5 and 6 works can in turn be classified as non Significant Operations or Significant Operations; they are defined as follows:

a) **Significant Operation:** a type 3, 4, 5 or 6 Operation carried out on a storage site whose Performance represents at least 40% of the total Performance of the System operated by the Storage Company.

b) **Non Significant Operation:** a type 3, 4, 5 or 6 Operation carried out on a storage site whose Performance represents less than 40% of the total Performance of the System operated by the Storage Company.

13.2.1 Obligations by Law

This category comprises the set of operations that must be carried out at specified times for regulatory compliance purposes. This category comprises, for example, periodic reservoir inspections: at the end of each Injection and Withdrawal phase, the Storage Company is obligated to check bottom hole static pressures and any presence of an aquifer water head, to verify the behaviour of the reservoir and any hydrocarbon issues. These inspections entail the shut-down of the reservoir and therefore they are scheduled with the goal of minimising the impact on the Storage Service.

13.2.2 Functional inspections of the facilities

The storage company schedules tests of the state of the facilities and maintenance operations, which it periodically carries out. When possible, they are scheduled to coincide with the periodic inspections of the reservoirs. For example, maintenance operations on electric substations, which affect reservoir capacity, are carried out during the scheduled shut-downs of the wells.
In other cases, the impact of maintenance work on operations is minimised by carrying out compressor maintenance, for example, during the spontaneous withdrawal from the wells, and maintenance on the treatment plants during the injection half-year.

13.2.3 Flow regulation, enhancement and development works

The purpose of flow regulation, enhancement and development of a storage site is to increase the storage capacity in a current concession.

Merely by way of non-comprehensive example, the aforesaid works consist of:
a) Workover operations;
b) Deepening of existing wells and/or recompletion to carry out storage operations in another level;
c) Drilling of new wells;
d) Construction and commissioning of new surface facilities and/or their enhancement;
e) Construction and commissioning of new treatment plants;
f) Construction and commissioning of new compression stations and/or their enhancements;
g) Commissioning of new flow lines;

h) Other enhancement works relating to the extension of storage to other levels without changes to the concession area;
i) Other enhancement works relating to the increase of the maximum storage pressure;

13.2.4 Restoration work following service emergencies

These are works directed at restoring pre-existing performance in reservoirs affected by service emergencies that have ceased, but have left the reservoirs impacted by the emergency with reduced performance. This category comprises restoration works after failures or anomalies in the operation of the surface facilities.

13.2.5 Interference with third-party works

These are operations deriving from works scheduled by third parties (e.g. construction/enlargement of roadbeds, motorways, railways, etc.) that are not a part of the gas system, but that generate impacts on the System.

13.2.6 Other works

This category comprises all works not included in the previous types: for example, this paragraph includes tests on wells and any tests on the reservoirs during the withdrawal/injection cycles to verify the behaviour of the reservoirs, and the tests and/or shut-downs required by regulatory authorities.

13.3 SCHEDULE OF MAINTENANCE OPERATIONS

The Storage Company shall periodically communicate the nature of the operations, the involved facilities and any impact with respect to the Performance made available by publishing the Maintenance Plan on its Website.

The Maintenance Plan comprises the annual schedule, the half-year revision and the monthly schedule, and the plan of unscheduled operations, discussed below.

13.3.1 Annual schedule of maintenance operations

No later than 1 February (or, if it is a holiday, the last preceding working day), the Storage Company communicates to the Shippers, through its own Website, the schedule of Maintenance Operations on the storage facilities planned for the following

Thermal Year, which will cause Performance unavailability or reduction. This communication is solely indicative and not binding.

Whenever possible, the Storage Company coordinates its own annual schedule of Maintenance Operations with the maintenance plans of the Transport Companies, in order to minimise service outage periods.

13.3.2 Half-yearly revision of the Maintenance Plan

The Storage Company reserves the right to revise the annual schedule of Maintenance Operations, with half-yearly periodicity, communicating it to Shippers - on an indicative, non-binding basis - through its Website no later than the First of August.

13.3.3 Monthly schedule of Maintenance Operations

No later than the 15th day of the Month preceding the month of service performance, the Storage Company will indicate, on its Website, the schedule of the Maintenance Operations that impact the daily performance (expressed in energy) available for the following Month.

13.3.4 Plan of unscheduled operations

Excepting the cases per Paragraph 13.2.4, the Storage Company publishes, at least 7 days before the start of the works, any unplanned maintenance operations or changes to the previously planned activity.
In the case of unscheduled maintenance operations, made necessary by the emergency situations described in Paragraph 18.2 of the chapter “Management of service emergencies”, the Storage Company shall promptly notify Shippers and shall make its best effort to minimise the duration of any reduction in capacity and the time necessary to restore the original situation.

13.4 IMPACTS ON CAPACITY PRICES CHARGED TO SHIPPERS

In the case of operations relating to subparagraphs 13.2.1, 13.2.2 that cause the total or partial reduction of performance with respect to the applicable adjustment coefficients for a number of days at full capacity above 20 for each of the injection or withdrawal phases, Shippers shall be entitled, for the days above the aforesaid limit, to a reduction of the capacity price related to the reduced performance in proportion to the actual reduction.

In the case of unscheduled operations per paragraph 13.3.4, that cause the total or partial reduction of available performance, calculated with respect to the adjustment coefficients in force at the time, for an annual number of days at full capacity above 20, Shippers shall be entitled, for the days above the aforesaid limit, to a reduction of the capacity price related to the reduced performance in proportion to the actual reduction.

CHAPTER 14

OPERATIONAL COORDINATION

14.1 FOREWORD

The chapter describes the coordination procedures that the Storage Company has adopted with the Major Transport Company, with the Major Storage Company and with the Transport assure Company, to assure safe and efficient operation, coordinated development and interoperability of the interconnected systems.

Although Edison Stoccaggio made preparations for the balancing market to be started on 1 December 2011, while awaiting the conclusion of the operational agreements with the Company in Charge of the Balancing, instrumental for the full implementation of the provisions of Resolution ARG/Gas 45/2011, it agreed to adopt a simplified mechanism for the start of the market in the period from 1 December 2011 to 31 March 2012. Starting on 1 April 2012, the natural gas balancing service will be fully applied through the use of the resources available at the hub of Edison Stoccaggio S.p.A.
Therefore, for the period from 1 December 2011 to 31 March 2012, some of the procedures described in this version of the Storage Code will be regulated by the simplified procedure agreed among the operator to allow to start the gas balancing market, whilst for the subsequent period they will be regulated by the definitive procedure as published on the Website of the storage company.

14.2 COORDINATION WITH THE MAJOR TRANSPORT COMPANY

The flow of information between the Storage Company and the Major Transport Company affects mainly the following activities:

a) Schedules of Maintenance Operations;
b) Procedure for the apportionment of the gas quantities subject to the accepted bids on the balancing market for Transport Shippers between storage systems;
c) General emergency situations;
d) Test of peak coverage for the cold season period with twenty-year frequency;

14.2.1 Schedules of Maintenance Operations

The Storage Company and the Major Transport Company, to minimise service outage periods and, when possible, to coordinate the works, exchange information about the schedules of maintenance operations on the network of the Major Transport Company and on the Storage System.

14.2.2 Procedure for the apportionment of the gas quantities subject to the accepted bids on the Shipper balancing market

The operators involved in the apportionment of the gas quantities subject to the accepted bids on the balancing market (storage companies, RNG transport companies, GME) have stipulated a procedure, diversified by period of application (simplified or definitive), to regulate information flows between the same parties for the definition of the quantities to be allocated to transport Shippers with storage availability at both Storage Companies, as set out in Paragraph 8.5 of the chapter “Balancing and replenishment of the storage sites” and published on the Website of the Storage Company.

14.2.3 General emergency situations

The Major Transport Company monitors pre-alarm situations and initiates all activities indicated in the various emergencies, as described in chapter 19 “Procedures for shifting from normal operating conditions to general emergency conditions”. The Storage Company complies with the requirements of the Major Transport Company within the Climatic Emergency Procedure.

14.3 COORDINATION WITH THE TRANSPORT COMPANY

The flow of information between the Storage Company and the Transport Company affects mainly the following activities:

1. the operational balancing service for transport companies;
2. operating conditions at the interconnections;
3. procedure for the apportionment of the gas quantities subject to the accepted bids on the Shipper balancing market;
4. Schedules of Maintenance Operations.

14.3.1 Operational Balancing

The storage company makes available to the Transport Company, for the operational balancing of the network, a storage service, according to the provisions of subparagraph 3.2.4 of the chapter “Description of the services”.

14.3.2 Operating conditions at the interconnections

The Storage Company and the Transport Company collaborate in the definition of the operating conditions at the interconnections between the Storage System and the network of the Storage Company.

14.3.3 Procedure for the apportionment of the gas quantities subject to the accepted bids on the Shipper balancing market

The operators involved in the apportionment of the gas quantities subject to the accepted bids on the balancing market (storage companies, RNG transport companies, GME) have stipulated a procedure, diversified by period of application (simplified or definitive), to regulate information flows between the same parties for the definition of the quantities to be allocated to transport Shippers with storage availability at both Storage Companies, as set out in Paragraph 8.5 of the chapter “Balancing and replenishment of the storage sites” and published on the Website of the Storage Company.

14.3.4 Schedules of Maintenance Operations

The Storage Company and the Transport Company, to minimise service outage periods and, when possible, to coordinate the works, exchange information about the schedules of maintenance operations on the network of the Transport Company and on the Storage System.

14.4 COORDINATION WITH THE MAJOR STORAGE COMPANY

The flow of information between the Storage Company and the Major Storage Company affects mainly the following activities:

1. Coordination in the offer of Storage Services, in the Assignment of Storage Capacity and in capacity transactions;
2. Procedure for the apportionment of the gas quantities subject to the accepted bids on the Shipper balancing market.

14.4.1 Coordination in the offer of services, in the Assignment of Storage Capacity and in capacity transactions

For the purposes of a correct attribution of the property rights indicated in paragraph 5.2 of the chapter “Assignment of storage capacity”, both during the assignment phase at the start of the thermal year and subsequently in case of new assignments and/or transactions, of the verification that Shippers have exercised them only once, of the definition of the apportionment of the volumes for the strategic service, of the coverage of the needs of the hydrocarbon services, of the application of capacity transfer procedures, the Storage Company shall coordinate with the Major Storage Company.
For the purposes of coordination, the Storage Companies exchange information about the Shippers.

14.4.2 Procedure for the apportionment of the gas quantities subject to the accepted bids on the Shipper balancing market

The operators involved in the apportionment of the gas quantities subject to the accepted bids on the balancing market (storage companies, RNG transport companies, GME) have stipulated a procedure, diversified by period of application (simplified or definitive), to regulate information flows between the same parties for the definition of the quantities to be allocated to transport Shippers with storage availability at both Storage Companies, as set out in Paragraph 8.5 of the chapter “Balancing and replenishment of the storage sites” and published on the Website of the Storage Company.

14.5 COORDINATION WITH THE ITALIAN POWER EXCHANGE (*GESTORE DEI MERCATI ENERGETICI*)

The flow of information between the Storage Company and the Italian Power Exchange (*Gestore dei Mercati Energetici*, hereafter GME) is assured by means of the exchange of information through SRG and it affects the following activity:

1. Coordination for verifying compliance with minimum and maximum limits in the submission of the bids by the authorised users to the gas balancing platform as defined in Article 5 of Resolution ARG/Gas 45/11.

14.5.1 Coordination for verifying compliance with minimum and maximum limits of the bids in the gas balancing platform as defined in Article 5 of Resolution ARG/Gas 45/11.

The Storage Company and the Italian Power Exchange have agreed on a procedure to regulate the flows of information between the same parties for the definition of the communication of the following data prescribed by Article 6 of Resolution ARG/Gas 45/11 as amended.
In particular, starting on 1 April 2012 the Storage Company communicates to the GME through SRG for each Shipper, no later than 8 pm of the Gas-Day the following data referred to the gas day to which the balancing session refers, as defined in paragraph 8.8:

- The residual Space available, taking into account the scheduled injection or withdrawal quantities;
- The Injection Capacity available net of the scheduled injection quantities or increased by the scheduled withdrawal quantities;
- The residual stock, taking into account the scheduled injection or withdrawal quantities;
- The Withdrawal Capacity available to the shipper, net of the scheduled withdrawal quantities or increased by the scheduled injection quantities.

14.5.2 Coordination with the Company in Charge of Balancing for activities instrumental to the management of the Guarantee Gas prescribed by Resolution ARG/Gas 45/11

The Storage Company and the Company in Charge of Balancing coordinate for the verification and acceptability of the quantities of gas present in the storage hub of Edison Stoccaggio S.p.A. which the Shipper intends to pledge as collateral as established in Chapter 8.
The Shipper expressly authorises the exchange of information, including sensitive data, for the purposes of the aforesaid verification.

CHAPTER 15

TAX AND CUSTOMS REGULATIONS

15.1 FOREWORD

The chapter summarises the responsibilities and obligations prescribed by current regulations, which the Storage Company and the Shippers undertake to fulfil.

15.2 EXCISE DUTIES

The Gas owned by the Shipper, moved in the storage reservoirs, is not subject to excise duties, since the moment that generates the tax obligation, represented by delivery to the end customer, does not take place, while the “depository” - i.e. the Storage Company - remains responsible for acquiring the measurement data at the entry into and exit from the System.
Holders of storage concessions shall pay excise duties for their own internal consumption, i.e. for the Gas necessary to the activities tied to the operation of the facilities in relation to the performance of the storage services rendered to Shippers.
The aforesaid excise duties are charged to each Shipper, in the terms and according to the procedures prescribed in Chapter 16 “Invoicing and payment”, on the basis of the consumption attributable to each Shipper, as determined per paragraph 16.A.2 of the Annex 16.A “Procedure for the attribution of electricity consumption, of excise duties and of the regional surtaxes”.

15.3 FISCAL DOCUMENTATION

The Storage Company produces, retains and makes available to the Financial Administration, for any appropriate checks, the following documentation:

1. The measurement reports, which state the quantity of Gas transited in a determined period of time (the month) in the delivery and redelivery points of the Storage System;
2. The declaration of consumption, whereby, using a form prepared directly by the Customs Agency, the Storage Company declares the annual quantities of Gas used for its own internal consumption, on which is determined both the tax (excise duties) and the regional surtax, according to the rate in force at the time of consumption; the Storage Company also declares the quantities of methane gas flowed into and out of its own system, without applying to them either the excise duty or the regional surtax, since other parties are responsible for their payment.

The declaration is prepared annually and submitted to the competent UTF no later than the end of the month of March of the following year. Within the same deadline, the competent party pays any adjustment balance relating to tax and regional surtax, with respect to the advance payment already made;

3. The initial service report requesting from the competent UTF the "company code" relating to the storage concession and to the attached facilities.

15.4 OTHER DOCUMENTATION USEFUL FOR TAX PURPOSES

The Storage Company shall also prepare the following documentation for Shippers:

1. The allocation reports, showing the quantity of Gas injected or withdrawn, in a defined time interval (the month) on behalf of each Shipper.
2. The delivery bills, or withdrawal/delivery documents in which it records the quantity of Gas owned by the Shipper deposited/withdrawn into/out of the Storage System, the transactions and the related stock for the Shipper, in order to overcome the presumption of purchase of the deposited natural gas by the Storage Company. The aforesaid bills are made available in advance through the Electronic System and subsequently sent to the Shipper for the acceptance signature.

15.5 REGIONAL SURTAX

For the purposes of taxing the Gas injected for consumption, in accordance with Italian Law no. 68 of 19 March 1993, Italian ordinary statute Regions may apply their own taxation, called "Regional surtax on methane gas".
The parties obligated to pay the surtax are the same as per point 15.2 above.

In particular, the Storage Company shall pay the aforesaid tax for their own internal consumption, i.e. for the Gas necessary to the activities tied to the operation of the facilities in relation to the performance of the storage services rendered to Shippers.

The regional surtax is charged to each Shipper, in the terms and according to the procedures prescribed in Chapter 16 "Invoicing and payment", on the basis of the consumption attributable to each Shipper, as determined per paragraph 16.A.3 of the Annex 16.A "Procedure for the attribution of electricity consumption, of excise duties and of the regional surtaxes".

15.6 SHIPPERS' OBLIGATIONS

The returns, the declarations and/or fiscal and/or administrative obligations prescribed by the current and future official provisions of the competent Authorities shall be the Shippers' responsibility, with the exception of those for which the law expressly prescribes otherwise.

The rights, taxes, any other charges, not only fiscal, and the related present and future surtaxes applicable by law or by provision of the competent authority shall be paid by the Shipper who exempts the Storage Company from any and all liability deriving from any false statement made by the Shipper, from failure to pay the aforesaid charges and/or taxes or from any violation of current regulations, subject to the obligations of the Storage Company as prescribed by law.

CHAPTER 16

INVOICING AND PAYMENT

16.1 FOREWORD

At the end of each month, the Storage Company issues the invoices relating to the prices for the Storage Service. In addition, an integral part of the activity in question is the issuing of other invoices, such as those relating to any adjustments and to the interest applied to late payments.

16.2 TYPES OF INVOICES

The invoicing activity enables the Storage Company to price the services provided in accordance with the Resolution.
The Storage Company publishes on its Website the values of the unit prices comprising the tariff for the use of the storage services.
Concerning the Special Services, described in subparagraph 3.3 of the chapter "Description of the Services", they will be priced according to the characteristics of the requested service.

In general, the list of invoices issued by the Storage Company in accordance with the present document can be divided between the invoices pertaining to the actual Storage Service and those that can be classified as "other types of invoice".

The former include the following items:

1. Price for space capacity, including the price for the charge-back of the costs pertaining to the portion of the unit prices for transport capacity pertaining to the inlet point or to the outlet point interconnected with the Storage System;
2. Price for the withdrawal peak capacity, when applicable;
3. Price for the injection peak capacity, when applicable;
4. Price for the injected and withdrawn gas, when applicable;
5. Balancing costs;
6. Price for the charge-back of the costs pertaining to the electricity consumption of the compression and treatment stations of the Storage Company, necessary to assure Injection and Withdrawal;
7. Price for the excise duties and the regional surtaxes pertaining to the electricity consumption of the compression and treatment stations of the Storage Company.

The “other types of invoice” include:

8. The invoices associated with adjustments and/or error corrections pertaining to previously issued invoices, in the form of debit or credit notes, such as the measurement or Allocation errors on one side and the print and/or calculation errors arisen on the other;
9. The invoices pertaining to late payment interest;
10. The invoices pertaining to the costs for managing the transactions and the Shipper Balancing Service;
11. The invoices pertaining to other items.

The prices per points 6. and 7. of this paragraph are determined according to the procedure described in Annex 16A “Procedure for the attribution of electricity consumption, of excise duties and of the regional surtaxes”.

In relation to the Shipper Balancing Service, the Storage Company undertakes to issue Credit Notes pertaining to the capacities assigned within the aforesaid Service.

16.3 THE CONTENT OF THE INVOICING DOCUMENTS

16.3.1 Invoices pertaining to storage services

Each document associated with the invoicing in question contains:

- the identifying data of the Storage Company and of the Shipper;
- the invoice number;
- the type of invoice;
- the month to which the invoice refers;
- the description of each individual item in the invoice;
- the monthly amount, expressed in Euro, relating to each individual item in the invoice;
- the total amount invoiced, expressed in Euro;
- the rate and the amount of the Value Added Tax associated with the amount of the invoiced prices, as required by current laws;
- any stamp duty.

16.3.2 The other types of invoice

With regard to the documents indicated in the points from 8) to 11) of paragraph 16.2 of this chapter, the document issued by the Storage Company contains:

- the identifying data of the Storage Company and of the Shipper;
- the invoice number;
- the type of invoice;
- the period to which the invoice refers;
- the references to the invoices to be adjusted/corrected;
- the items to be adjusted/corrected;
- the amount to be debited or credited to the Shipper, expressed in Euro;
- the rate and the amount of the Value Added Tax associated with the amount of the invoiced prices, as required by current laws;
- any stamp duty.

16.3.3 The annexes to the invoices

To supplement the information provided in the main body of the invoice and described in subparagraphs 16.3.1 and 16.3.2 above, the Storage Company also provides an annex showing the complete and comprehensive detail of the invoicing calculations made, indicating all basic quantities used to compute the amounts; by way of non-comprehensive example, such quantities include:

1. the unit prices for storage and transport;
2. the daily Allocations in terms of energy;
3. the interest applied.

16.4 INVOICE ISSUE AND PAYMENT TERMS

16.4.1 Invoice issue terms

No later than the fifth working day of the month following the performance of the service, the Storage Company issues the invoice pertaining to the compensation per points 1., 2., 3. of the above paragraph 16.2.
No later than the twentieth day of the month M+2 from the performance of the Shipper Balancing Service, the Storage Company issues the credit note pertaining to the amounts deriving from the assignment for the Shipper whose capacities made available were assigned, as provided by paragraph 5.9.1 above.

No later than the fifteenth working day of the month following the performance of the service, the Storage Company issues the invoices pertaining to the prices per points 4. through 12. of the above paragraph 16.2, including the one relating to the Shipper Balancing Service.
At the same time, if it is necessary to recognise the amounts deriving from the application of the provisions of Paragraph 8.10 and Annex 16A, Edison Stoccaggio S.p.A. shall provide Shippers with the data necessary to issue, at their care and expense, the accounting documents suitable for collecting the amounts due to them by the Storage Company. Said amounts shall be paid by the Storage Company no later than 30 days from the date of issue.
The payment of the accounting documents described above, by Edison Stoccaggio S.p.A., is subject to verification that the Shippers, in view of contracts stipulated in accordance with this Code for the current Thermal Year or for previous Thermal Year, do not have amounts invoiced and past due, exceeding the value of the guarantees issued to cover the obligations deriving from the aforementioned contracts.
In addition, said accounting documents (representing credits for Edison Stoccaggio) shall be accounted for in deduction from the value of financial exposure of the Shipper with respect to the storage company.

With regard to the invoices per point 8. of subparagraph 16.2 of this chapter in cases of measurement or Allocation errors, verifications are prescribed (as indicated in the chapter “Balancing”), whereupon the related adjustment procedures are activated. The deadline for the issue, by the Storage Company, of the related debit and credit notes is set to the end of the third month following the one to which the adjustment is referred.

16.4.2 Invoice payment terms

The Shipper shall pay the invoices no later than 30 days from their date of issue, by pre-authorised account direct debit (R.I.D. procedure) with a Bank indicated by the Storage Company. Alternatively, with the Parties’ agreement, the Shipper may make the payment by electronic collection order (Ri.Ba.) or bank transfer with fixed value date matching the expiration date through leading banks indicated by the Storage Company.

If the due date of the invoice falls on a Saturday, Sunday or holiday, the Shipper shall pay the invoice no later than the first subsequent working day.
Shippers shall pay the invoices within the terms set out herein: any delays shall be subject to penalties in accordance with the method described below and constitute one of the causes for contract termination prescribed in Paragraph 17.4 of the chapter “Responsibilities of the Parties”.

Any misprints and/or miscalculations in the amounts invoiced are generally corrected before the payment term, determining the cancellation of the document and the transmission of a new invoice.

16.4.3 Interest for late payment cases

In case of late payment of an invoice, the Shipper shall owe, on the unpaid invoiced amounts, interest for each day of delay, amounting to the interest rate of the period as published on the Official Journal of the Republic of Italy by the Ministry of the Economy and Finance as prescribed by Article 5 of Italian Legislative Decree no. 231/2002

16.4.4 Failure to pay and payment order in case of insolvent Shipper and enforcement of the financial guarantee

Edison Stoccaggio S.p.A,, in the presence of invoices issued and not paid by the Shipper (invoices, any credit notes, including VAT) for amounts exceeding the value of the guarantees issued, also for the purpose of exercising the retention right per paragraph 17.4.1 below, or of enforcing the Guarantee Gas in accordance with article 5.2.1.1.1, 5.2.1.1.2. and 5.2.1.1.3 above communicates the Shipper the quantity of stored Gas which, as from the date of this communication, may not be used by the Shipper.
This quantity shall calculated according to the amounts invoiced and not paid (invoices, any credit notes, including VAT, and also taking into account the late payment interest accrued at the date of communication on the amounts past due) exceeding the value of the guarantees by applying the last value of the component per Article 6 of the TIVG approved with resolution ARG/GAS 64/09 as amended.
Once 15 days have elapsed from the aforesaid communication without either the payment of the amount uncovered by existing guarantees or the restoration of the guarantees, Edison Stoccaggio shall enforce the guarantees issued and if they are not sufficient it shall proceed, even without the early termination of the Contract, to exercise the retention right per paragraph 17.4.1 below or, alternatively, to the enforcement of the guarantee on the Guarantee Gas for the quantity of gas corresponding to the credit for principal and late payment interest still remaining after the successful enforcement. In this sense, Edison Stoccaggio S.p.A. shall be understood to be authorised beforehand by the Shipper with no need for any further communication, proof or justification, warning or request to the Shipper, all objections having been removed, to sell said quantity of gas to satisfy its own credit and the costs incurred according to the procedures prescribed as a result of exercising the retention right or the right to enforce the guarantee on the gas.

If the Shipper fully pays the uncovered credit before said term, Edison Stoccaggio S.p.A shall notify it of the day from which it will again be possible to dispose of all or part of the previously unusable gas. Similarly, Edison Stoccaggio S.p.A., after the procedures prescribed to satisfy its credit and having verified that there are no additional unpaid amounts, shall notify any quantities of gas that have become available again.
In case of insolvency proceeding, Edison Stoccaggio S.p.A shall withhold € 50,000 from the amount collected as fixed charge for the management of the sale to offset the administrative and other expenses incurred, which therefore shall not be deemed as compensation for the past due amounts. The fixed charge is reassessed each Thermal Year starting from the 2014-2015 thermal year, applying the general consumer price index for blue collar and white collar households measured by ISTAT.

Edison Stoccaggio S.p.A. shall include the gas quantity per the present paragraph in calculating the Shipper's Gas availability for:

i) verifying compliance with the Injection and Withdrawal profiles and the consequent application of the balancing costs;
ii) calculating the available Injection and Withdrawal Capacities;
iii) application of the price equal to 2xCVS in the prescribed cases.
iiii) applying the provisions of Article 15.14 of Resolution no. 119/05 and of Paragraph 5.4 of this Storage Code.

If the Shipper has several payables past due to Edison Stoccaggio S.p.A, also relating to Contracts for previous Thermal Years, and makes one or more payments that do not fully extinguish the aforesaid past due payables, each of these payments shall be allocated, regardless of any different indication by the Shipper at the time of the payment, according to the following order of priority:

a) to the invoices pertaining to the tariffs of the Mandatory Services, including the invoices prescribed in letters 6 and 7 and 8 per paragraph 16.2 (as well as management charges and late payment interest) and, among these invoices, to those that expired first;

b) to the invoices pertaining to the prices for the purchase of the Strategic Gas tariffs (as well as the related late payment interest) and, among these invoices, to those that expired first;

c) to the invoices pertaining to the balancing costs (as well as the related late payment interest) and, among these invoices, to those that expired first;

d) to the remaining invoices.

If Edison Stoccaggio S.p.A. exercises its right to enforce, partially or in full, the guarantees per paragraph 5.2.1, the amount to be enforced shall be allocated according to the aforesaid order of priority.

16.4.5 Procedures for the advance transmission and delivery of the invoices

The invoices and the Credit Notes issued by the Storage Company, including the annexes, shall be sent in advance and then delivered to the Shipper in the ways prescribed in the Storage Contract.

16.5 OBJECTIONS

If the Shipper has any objections about the invoiced amount, the Shipper shall nonetheless pay the invoice in full. If the objection is found to be well grounded, the correction shall be made simultaneously with the first invoice following the resolution of the objection, taking into account the interest as defined in case of late payment. For the regulation of any arbitration necessary to resolve the dispute, please refer to paragraph 17.8 of the chapter “Responsibilities of the Parties”.

Invoices against which the Shipper has not expressed any objections within 60 days from the date of issue shall be deemed to be definitively accepted by the Parties.

ANNEX 16A

PROCEDURE FOR THE ATTRIBUTION OF ELECTRICITY CONSUMPTION, OF EXCISE DUTIES AND OF THE REGIONAL SURTAXES

16A.1 APPORTIONMENT OF COSTS PERTAINING TO ELECTRICITY CONSUMPTION

The Storage Company attributes to Users of the Hydrocarbon Storage, Modulation and Shipper Balancing Services, whose Allocations are consistent with the prevalent flow of the system FP_i, the charges to cover the electricity consumption of compression and treatment stations and recognises an amount equal to the avoided cost of the consumption to Shippers whose allocations are of the opposite sign to FP_i as specified in the following procedure and subject to the provisions of Paragraph 16.4.1.

The following is defined:

$$EE_{\%} = \frac{\sum_i EE_i}{\left|\sum_P S_k\right|}$$

Where:

EE_i = value in €, attributable to the physical movement of Gas extracted from and injected into the System, of the charges to cover the electricity consumption necessary for the operation of the compression and treatment plants recorded for the Period P measured at the i-th storage site;

S_k = value of the Allocation for the Period P of the k-th User of the Hydrocarbon Storage, Modulation and Shipper Balancing Service on Gas-Day G at the virtual interconnection point corresponding to the storage Hub. The values of $S_{k,}$ are understood to be positive if they concur with FP_i and negative if they do not concur. Until 31 March 2013, the values of $S_{k,}$ are understood to be positive if they are consistent with the measured physical flow and deemed equal to zero for the purposes of the application of the above formula in the other cases.

The Storage Company allocates the charges to cover the electricity consumption necessary for the operation of the compression and treatment plants in proportion to the total volume allocated to the Shipper according to the following criteria;

a) The Shipper who moved gas at the storage site in the same direction as FP_i shall be attributed a Cost for Electricity Cel_k equal to the percentage of $EE_{\%}$ relating to the direction of FP_i applied to the quantity of gas moved;

b) The Shipper who moved gas at the storage site in the opposite direction to FP_i shall be recognised an amount Cel_k in € equal to the percentage of $EE_{\%}$ relating to the direction of FP_i applied to the quantity of gas moved.

Cel_k is calculated using the following formula:

$$Cel_k = S_k \times EE_{\%}$$

Until 31 March 2013, only letter a) shall be applied to Shippers who moved gas consistently with the physical flow of the System and letter b) shall not be applied.

16A.2 APPORTIONMENT OF EXCISE DUTIES

The excise duties relating to gas consumption, calculated as defined in paragraph 8.23 of the chapter "Balancing and replenishment of the storage sites" are apportioned among them on the basis of the following criteria:

The Storage Company allocates to the Shipper the charges relating to the excise duties pertaining to gas consumption in proportion to the total volume allocated among the Users of the Hydrocarbon Storage, Modulation and Shipper Balancing Services according to the following criteria;

a) The Shipper who moved gas at the storage site in the same direction as FP_i shall be attributed the amount for the excise duties $ACC_{gas,k}$ according to the following formula (1).;

b) The Shipper who moved gas at the storage site in the same direction as FP_i shall be attributed the amount for the excise duties $ACC_{gas,k}$ calculated according to the following formula (1). and subject to the provisions of Paragraph 16.4.1.

Until 31 March 2013, only letter a) shall be applied to Shippers who moved gas consistently with the physical flow of the System and letter b) shall not be applied.

$$ACC_{gas,k} = \frac{\sum_{g=1}^{P} AC_{k,g}}{\sum_{g=1}^{P}\sum_{K} AC_{k,g}} \times ACC_{GAS} \qquad \textbf{(1)}$$

Where:

ACC_{GAS} is the total amount of the excise duties relating to total gas consumption recorded in the period P, equal to $\sum_{g=1}^{P}\sum_{K} AC_{k}$, calculated as defined in paragraph 8.3 of the chapter "Balancing and replenishment of the storage sites";

$ACC_{gas,k}$ is the portion of ACC_{GAS} charged to the Shipper U in the period P;

$\sum_{g=1}^{P}\sum_{K} AC_{k}$ is the total internal consumption of gas of the set of reservoirs k forming the System recorded in the period P;

$\sum_{g=1}^{P} AC_{k,g}$ is the internal consumption of gas attributed to the Shipper U in the Period P, as defined in paragraph 8.3 of the chapter "Balancing and replenishment of the storage sites";

16A.3 APPORTIONMENT OF REGIONAL SURTAXES

The regional surtaxes relating to gas consumption, calculated as defined in paragraph 8.3 of the chapter "Balancing and replenishment of the storage sites" are apportioned among them on the basis of the following criteria:

The Storage Company allocates to the Shipper the charges relating to the regional surtaxes pertaining to gas consumption in proportion to the total volume allocated among the Users of the Hydrocarbon Storage, Modulation and Shipper Balancing Services according to the following criteria;

c) The Shipper who moved gas at the storage site in the same direction as FP_i shall be attributed the amount for the regional surtaxes $AR_{gas,k}$ according to the following formula (2).;

d) The Shipper who moved gas at the storage site in the same direction as FP_i shall be attributed the amount for the regional surtaxes $AR_{gas,k}$ calculated according to the following formula (2) and subject to the provisions of Paragraph 16.4.1.

Until 31 March 2013, only letter c) shall be applied to Shippers who moved gas consistently with the physical flow of the System and letter d) shall not be applied.

$$AR_{gas,k} = \frac{\sum_{g=1}^{P} AC_{k,g}}{\sum_{g=1}^{P}\sum_{K} AC_{k,g}} \times AR_{GAS}$$

Where:

AR_{GAS} is the total amount of the regional surtaxes relating to total gas consumption recorded in the period P, equal to $\sum_{g=1}^{P}\sum_{K} AC_k$, calculated as defined in paragraph 8.2 of the chapter “Balancing and replenishment of the storage sites”;

$AR_{gas,k}$ is the portion of AR_{GAS} charged to the Shipper U in the period P;

$\sum_{g=1}^{P}\sum_{K} AC_k$ is the total recorded internal consumption of gas in the period P of the set of reservoirs k forming the System;

$\sum_{g=1}^{P} AC_{k,g}$ is the internal consumption of gas attributed to the Shipper U in the Period P, as defined in paragraph 8.2 of the chapter “Balancing and replenishment of the storage sites”;

CHAPTER 17

RESPONSIBILITIES OF THE PARTIES

17.1 OBLIGATIONS OF THE PARTIES

17.1.1 Obligations of the Shipper

Within the terms and conditions prescribed by this Contract, the Shipper undertakes:

a) to deliver or cause to be delivered through the Major Transport Company for injection at the Delivery Point and to withdraw or cause to be withdrawn through the Major Transport Company for withdrawal at the Redelivery point the gas to which it is entitled according to the Injection Schedule and the Withdrawal Schedule, with the operating procedures indicated in chapter 6;
b) to deliver or to cause to be delivered through the Major Transport Company to the Storage Company at the Delivery Point gas whose quality shall meet the specifications contained in Annex 10A;
c) to deliver or to cause to be delivered through the Major Transport Company to the Storage Company at the Delivery Point gas at least at the minimum pressure indicated in Chapter 11;
d) not to request the withdrawal of a quantity of gas exceeding the quantities injected by the Shipper, who executed a Contract for the storage services, in the injection phase or to which otherwise the Shipper is entitled in storage;
e) to pay the price relating to the Storage Service and to the Transport Capacity requested by the Storage Company, in addition to every other amount due to the Storage Company as a result of the performance of the Contract, according to the procedures set out herein;
f) to utilise the Electronic System according to the procedures and within the time prescribed by the present Code guaranteeing, in its utilisation, the adoption of procedures that will in no way prejudice its functionalities and prevent its operation, even temporarily.

If the Shipper, for any reason, does not deliver or cause to be delivered any quantity of gas at the Delivery Point, the Shipper shall have no liability of any kind in relation to said missed delivery, but shall remain obligated only to pay the related Storage prices, unless the Shipper is exonerated from said obligation in accordance with any other provision of said Contract.

17.1.2 Obligations of the Storage Company

Within the terms and conditions prescribed by this Contract, the Storage Company undertakes:

a) to re-deliver in the Withdrawal phase quantities of gas that are equivalent in energy terms, expressed in GJ, to the quantities injected by the Shipper during the Injection phase;
b) to re-deliver to the Shipper at the Redelivery Point the quantities of gas, expressed in GJ, in compliance with the confirmed daily reservations, at the quality and pressure values indicated in chapters 10 and 11;
c) to verify and confirm the reservations communicated by the Shipper, with the procedures prescribed by the Storage Code;
d) to carry out the activities necessary for the Allocation of the gas moved to each individual Shipper;
e) to take delivery from the Major Transport Company in the Gas-Day the quantities of gas, expressed in GJ, delivered or caused to be delivered by the Shipper at the Delivery Point (point of exit of the transport network interconnected with the storage sites), in compliance with confirmed daily reservations, meeting the quality and pressure specifications defined in the Storage Code;
f) to re-deliver to the Major Transport Company in the Gas-Day the quantities of gas, expressed in GJ, re-delivered or caused to be re-delivered by the Shipper at the Redelivery Point (point of entry into the transport network interconnected with the storage sites), in compliance with confirmed daily reservations, meeting the quality and pressure specifications defined in the Storage Code;
g) to guarantee the availability of a transport capacity to and from the Storage System that is adequate to the commitments made with the Shippers by executing the Contract;
h) to carry out the transport capacity scheduling activities using the schedules received from its own Shippers, as confirmed by the Storage Company;
i) to guarantee the availability of transport capacity adequate to the commitments made with the Shippers by executing the Contract, the Storage Company requests the Major Transport Company, in accordance with the provisions of Resolution 297/2012/R/gas and in any case after the time lines established in its own Storage Code for capacity assignments, the transport capacity instrumental for the performance of the Storage Services, with the following procedures:

- capacity at the outlet point interconnected with the Storage System:

    i. transport capacity on an annual basis for the April-March time interval, determined to be equal to the maximum Injection capacity available to Shippers on the basis of the capacity assigned to them for the Mandatory Services with annual duration and on the basis of the application of the maximum value of the adjustment coefficients of the Injection capacity;

ii. transport capacity for less than one year, determined to be equal to the Injection capacity assigned to Shippers for the Shipper Balancing Service, in addition to the transport capacity requested by the Storage Company in accordance with the previous point;

- capacity at the inlet point interconnected with the Storage System:

  i. transport capacity on an annual basis for the April-March time interval, determined to be equal to the maximum Withdrawal capacity available to Shippers on the basis of the capacity assigned to them for the Mandatory Services with annual duration and on the basis of the application of the maximum value of the adjustment coefficients of the Withdrawal capacity;
  ii. transport capacity for less than one year, determined to be equal to the Withdrawal capacity assigned to Shippers for the Shipper Balancing Service, in addition to the transport capacity requested by the Storage Company in accordance with the previous points;

j) to guarantee to all Shippers, in an impartial and non-discriminatory manner, access to the Electronic System, assuring its correct operation, its maintenance and upgrading, guaranteeing, in case of malfunction, alternative ways to carry out the prescribed activities and promptly notifying the start and duration of the malfunction and the time of restoration of the service.

To fulfil the aforementioned obligations, the Storage Company, in accordance with Resolution 297/2012/R/gas, operates according to the indications received from its Shippers and is not responsible for the correctness and completeness of the data communicated by its Shippers. Therefore, the Shippers expressly recognise that the Storage Company may not be held liable for compliance with the law-mandated obligations met by the Storage Company in relation to the transport contract on the basis of the data received by it.

17.2 CONTRACT BREACHES

17.2.1 Breaches by the Storage Company

17.2.1.1. Pressure specifications

If the Gas made available by the Storage Company to the Shipper at the Redelivery Point does not meet the pressure specifications prescribed in the Storage Code, the

Shipper, in the absence of prompt notification by the Storage Company, shall promptly notify the Storage Company and, without prejudice to the obligation to pay the storage tariffs, shall be entitled to obtain from the Storage Company, upon submission of suitable documentation, reimbursement for all costs and expenses incurred as a result of the failure to comply with the pressure specifications, within the limits indicated in paragraph 17.3.

17.2.1.2. Quality specifications

If the Gas made available by the Storage Company to the Shipper at the Redelivery Point does not meet the quality specifications prescribed in the Storage Code, the Shipper, the Storage Company shall promptly notify the Shipper and the Transport Company. The Transport Company shall be entitled to refuse withdrawal of said Gas; moreover, without prejudice to the obligation to pay the storage tariffs, the Shipper shall be entitled to obtain from the Storage Company, upon submission of suitable documentation, reimbursement for all costs and expenses incurred as a result of the failure to comply with the quality specifications, within the limits indicated in paragraph 17.3.

17.2.1.3. Failure to provide performance

With the exception of a) Force Majeure, if the Storage Contract fails to provide the performance prescribed by the Storage Contract and as a consequence of such behaviour it is impossible to complete the performance, the Shipper itself, for the period when performance is suspended, shall be exonerated from all obligations connected with the payment of the capacity price relating to the performance not provided and shall be entitled to obtain from the Storage Company, upon submission of suitable documentation, reimbursement for all costs and expenses incurred as a result of the lack of performance, within the limits indicated in paragraph 17.3.

17.2.2 Breaches by the Shipper

17.2.2.1. Pressure specifications

If the Gas delivered or caused to be delivered by the Shipper to the Storage Company at the Delivery Point does not meet the pressure specifications prescribed in this Code, for any reason, the Storage Company, in the absence of prompt notification by the Shipper, shall promptly notify the Shipper and, in addition to being exonerated by the obligation to inject into the System the quantities of Gas scheduled by the Shipper for the period in question to the extent to which the injection is not allowed by the actual delivery pressure, it shall be entitled to reduce the injection of the Gas in question until obtaining the restoration of the values within the pressure specifications per the present document.

All properly documented costs and expenses incurred by the Storage Company as a result of the failure to meet the pressure specifications, shall be paid by the Shipper, within the limits set out in paragraph 17.3 below and subject to the obligation for the Shipper to pay the storage tariffs.

17.2.2.2. Quality specification

If the Gas delivered or caused to be delivered by the Shipper to the Storage Company at the Delivery Point does not meet the quality specification prescribed in this Code, for any reason, the Storage Company, in the absence of prompt notification by the Shipper, shall promptly notify the Shipper and the Transport Company and shall be entitled to refuse the injection of said Gas into the system.

In addition, all properly documented costs and expenses incurred by the Storage Company as a result of the failure to meet the quality specification, shall be paid by the Shipper, within the limits set out in paragraph 17.3 below and subject to the obligation for the Shipper to pay the storage tariffs.

17.3 LIMITATION OF LIABILITY

17.3.1 Misconduct/Gross negligence

The Parties liability for any damage deriving, or otherwise connected, to the performance or to the complete or partial failure to perform their obligations or to the delayed performance of their obligations resulting from execution of the Storage Contract, is expressly limited solely to cases of misconduct and/or gross negligence.

17.4 EARLY TERMINATION OF THE CONTRACT

17.4.1 Early termination by the Storage Company

The Storage Contract, in addition to the causes established by law, can be terminated by the Storage Company, in advance relative to the specified expiration, by sending a written notice to the Shipper, in accordance with Article 1456 of the Italian Civil Code, with a copy to the Authority for information, in the following cases:

a) The Shipper, for any reason, no longer fulfils even a single one of the requirements for access to the System per paragraph 5.2;
b) Prolonged improper use of the information systems by the Shipper in such a way as to make: (i) said information systems totally or partially unusable; (ii)

hard for the Storage Company to fulfil its contractual obligations and/or to exercise its rights with respect to Shippers in a punctual manner;

c) Prolonged failure to comply with the Shipper's obligation to pay the tariffs invoiced by the Storage Company for any of the types prescribed in the Contract. The Shipper's failure to pay the amounts due for 2 months of service is a prolonged breach;
d) Bankruptcy proceedings, receivership, extraordinary administration, composition with creditors or other insolvency proceedings are initiated against the Shipper, in or out of court;
e) Resolution of the liquidation or dissolution of the Shipper for any reason or cessation of the actual activity of the Shipper;
f) Revocation and/or cancellation of all or part of the financial guarantees per article 5.2.3 above for any reason;
g) Impossibility to provide the performance because of Force Majeure, if an event qualified in Paragraph 17.6 as Force Majeure continues for a period longer than two months.

In all the above cases of contractual termination, the following shall take place:

h) The Storage Company may suspend acceptance of the Shippers' schedules, notifying the Authority, the Italian Ministry of Economic Development, the Major Transport Company;
i) The Shipper shall in any case pay to the Storage Company the amounts actually accrued, for any reason, including the related compensation, until the date of termination of the Contract. Excepting the case of termination because of Force Majeure, the Shipper shall also pay to the Storage Company an amount resulting from discounting to the present - at the date of termination and at a discount rate equal to the average annual rate of return of ten-year Italian Government Bonds of the last available year, increased by 0.75% - the amounts representing the compensation due by the Shipper for the period between the date of the early termination and the date of the natural expiration of the Contract, and to indemnify the additional damages caused to the Storage Company, indemnifying and holding harmless the Storage Company with respect to any claim set forth in relation to damages caused to other parties;
j) The Storage Company, in its capacity as depository, shall also be entitled to retain any quantities of Gas present in the System and shall be automatically and preventively authorised by the Shipper with no need for any further communication, proof or justification, warning or request to the Shipper, all objections having been removed, to sell the aforesaid gas to satisfy its own credit and the costs incurred for the sale of the gas by competitive procedure using the last value of the component per article 6 of the TIVG approved with resolution ARG/GAS 64/09 as amended, available as an auction starting price.

17.4.2 Early termination by the Shipper

If an event occurs which prevents the Shipper from carrying out Injection or Withdrawal into/out of the System for a consecutive period exceeding 6 months starting from the date of occurrence of said event, the Shipper may terminate the Contract early by sending a written notice, transmitted in advance via Fax and/or email, in accordance with Article 1456 of the Italian Civil Code.

The affected Shipper shall nonetheless pay to the Storage Company the amounts per paragraph 17.4.1 letter i).

If all or part of the Capacities provided by the terminated Contract are assigned to another Shipper, the capacity compensation collected by the Storage Company as a result of the assignment of said capacities, shall be credited to the Shipper affected by the termination.

17.5 TRANSFER OF THE CONTRACT

Neither Party may transfer the Storage Contract to third parties without the prior written authorisation of the other party, which may not be denied if the third party meets the suitability requirements prescribed in this Storage Code.

The aforesaid written authorisation shall not be necessary if the transferee is a company controlled by the transferor or under the shared control of another company in accordance with Article 2359 Paragraph 1 of the Italian Civil Code and the transfer shall be effective from the date indicated in the deed of transfer notified by the Transferor Party to the Storage Company.

In case of transfer, the Shipper undertakes to maintain all the financial guarantees issued to guarantee the obligations deriving from the Contract until they are replaced by the transferee with equivalent guarantees.

17.6 FORCE MAJEURE

17.6.1 Definition

Force majeure means every event, act, fact or circumstance not due to the Party that invokes it (“Affected Party”), outside the Parties’ control, and that could not be foreseen and/or prevented with ordinary diligence and at reasonable costs, having the effect of making it impossible or illegitimate to comply with the obligations of the

Affected Party, so long as the Force Majeure cause persists but solely when such circumstance impacts the System of the Storage Company.

17.6.2 Causes

Merely by way of non-comprehensive example, the following are Force Majeure causes:

a) wars, terrorist actions, sabotage, vandalism, riots;
b) adverse natural phenomena including lightning, earthquakes, landslides, fires and floods;
c) explosions, radiation and chemical contamination;
d) strikes, lock-outs and any other form of industrial action, with the exclusion of company conflict cases, declared on occasions other than collective bargaining, directly involving the Storage Company or the Shipper;
e) late or missed obtainment of the necessary permits and/or concessions, instrumental for the Storage service;
f) flaws, faults or failures of the facilities, equipment or installations functional to the System.

17.6.3 Effects

The Affected Party shall be exonerated from all liabilities connected with the failure to comply the obligations prescribed in the Storage Contract, as well as for any damage or loss incurred by the other Party, to the extent to which they are affected by Force Majeure cause and for the period of persistence of said cause.

Upon the occurrence of a Force Majeure event, the Affected Party shall in any case do its utmost, to the best of its ability, to limit the negative effects of the event in order to allow, in the shortest possible time, the resumption of the normal performance of its contractual obligations.

A Party's impossibility to fulfil its payment obligation is not considered Force Majeure.

17.6.4 Notification

The Affected Party shall promptly notify the other Party:

a) of the occurrence of the event that makes it totally or partially impossible to fulfil the obligations, providing a clear indication of the nature of the event itself

and also indicating, if a reasonable estimate can be made, the time that may be necessary to remedy it;

b) the development of the event, providing a regular update about the expected duration;
c) the cessation of the Force Majeure event.

17.6.5 Impact on storage prices

In the presence of a Force Majeure cause, and for the entire time of persistence of said cause, the price for the Withdrawal and Injection capacity to be charged to the Shipper shall be applied:

a) *Pro rata temporis,* in case of total interruption of the performance of the service;
b) In proportion to the actual reduction of the quantities of Gas delivered and/or re-delivered to the Shipper at the Delivery and/or Redelivery Points, in case of partial reduction in the performance of the service.

17.7 ABSENCE OF TRANSFER OF THE PROPERTY AND TITLE OF THE GAS

Subject to the provisions of Articles 5.2.1.1.1, 5.2.1.1.2, 5.2.1.1.3, 16.4.4 and 17.4.1 the delivery of the Gas at the Delivery Point or at the Redelivery Point from or on behalf of the Shipper shall not entail the transfer of the property and title of said Gas to the Storage Company which shall hold the Gas in custody for the sole purposes of the performance of the Service. The property and title of the delivered Gas shall remain the Shipper's at all times, since custody of the Gas by the Storage Company does not constitute irregular deposit per Article 1782 of the Italian Civil Code.

17.8 RESOLUTION OF DISPUTES

17.8.1 Competence of the Authority

In accordance with the provisions of Article 18 of Resolution no. 137/02, in case of disputes relating to the interpretation and to the enforcement of the Storage Contract and until adoption of the regulations per Article 2.24, letter b), of Italian Law no. 481 of 14 November 1995, the parties shall submit the matter to the Authority for activation of an arbitration procedure, according to the procedures defined by the Authority with its own regulations.

17.8.2 Transitional provisions

Until the Authority promulgates the regulations defining the procedures for activating an arbitration procedure, any disputes shall be regulated according to the procedures indicated below.

17.8.3 Preventive review

Any disputes which should arise between the Storage Company and the Shipper in relation to the interpretation and enforcement of the Storage Contract, excepting cases that, in the opinion of one of the parties, require invoking precautionary and urgent measures, shall be submitted, at the initiative of each party and after formally notifying the other party, to the preventive joint review of persons appointed for this purpose by the parties themselves and identified among first-level executives, in the attempt to reach a satisfactory agreement.

17.8.4 Judicial resolution

If the settlement attempt is not successful within sixty days from the date of the notice per the preceding paragraph - and subject to the dispute resolution powers attributed to the Authority for Electricity and Gas by the law and in accordance with Article 17.1 of the Resolution - each of the parties may refer to the Judicial Authority for resolution of the dispute.

For such cases, the parties recognise the exclusive jurisdiction of the Court of Milan.

17.8.5 Technical arbitration

All disputes of a technical nature, which are not resolved amicably within 15 (fifteen) working days from the time when one Party informs the other of the existence of the dispute, shall be definitively resolved, in accordance with the National Arbitration Regulations of the Milan Arbitration Chamber, by a single arbitrator, who shall be

appointed, shall proceed and shall decide in accordance with said regulations. The Arbitrator shall have adequate technical competencies in the Gas sector and more specifically with regard to the transport, discharge, regasification, storage and sale of Gas. The arbitration proceeding shall be carried out in the Italian language. The location for the arbitration shall be Milan, Italy. The arbitrator shall decide informally according to law. The Arbitrator shall make his/her decision known in writing, indicating its reasons, no later than 60 (sixty) working days from the date of acceptance of the appointment. The arbitrator's decision shall be definitive and binding for the Parties. The Parties waive any and all form of challenge, with the exception of any conflicts of interest, intentional misconduct or manifest error of the arbitrator.

17.9 GOVERNING LAW

The present document is governed by the laws of Italy.

17.10 INTELLECTUAL PROPERTY

Any intellectual property right made available by one of the Party under the Storage Contract shall remain in the property and availability of said Party or its licensor.

17.11 CONFIDENTIALITY

17.11.1 Obligations of the Parties

All information about the activity of one of the Parties, including those deriving from the exchange of data in electronic form between Storage Company and Shipper in accordance with the Storage Code, shall be deemed confidential and may not be used by either Party, by its employees and/or agents except in view of the execution of the Storage Code, and may they be disclosed to third parties solely in accordance with written preventive instructions or authorisations of the Party to which said information are referred and after the signature of a similar confidentiality clauses by third parties.

17.11.2 Exceptions

Subject to the provisions of the previous paragraphs, information shall not be deemed confidential if, and to the extent to which, it is:

a) information that was in the public domain at the time when it was disclosed or that become public for reasons other than the breach or the fault of the receiving Party;

b) information already known to the receiving Party at the time it was disclosed by the other Party and for which there was no confidentiality obligation;

c) information whose confidentiality is forfeited when so required to fulfil obligations by law or upon the Authority's request;

d) information that the receiving Party has legally obtained from third party without violating any confidentiality obligation to the other Party.

e) Information about coordination between storage companies and transport companies in accordance with the Storage Code

f) Information about the management of the "Gas Emergency Procedure" per Chapter 19 "Procedures for shifting from normal operating conditions to general emergency conditions"

g) Information communicated to administrative, regulatory or judicial bodies and/or authorities and/or otherwise in compliance with current regulatory provisions or instructions

17.11.3 Effectiveness of the obligations

The confidentiality obligations indicated herein shall remain in force for a period of 2 years from the effective date of cessation or termination of the contractual obligations arisen in compliance with the Storage Code.

17.12 PRIVACY

In relation to Italian Law no. 675/96 as subsequently amended (hereafter, "Law"), the Parties acknowledge that:

a) the Shipper is the Data Controller (hereafter: the "Controller"), in accordance with Article 1, Paragraph 2, Letter d) of the Law.
b) The Storage Company has the experience, reliability, capabilities and structures required by Article 8 of the Law to perform the function of "Personal Data Supervisor" (hereafter, "Data Supervisor") and to guarantee full compliance with current personal data processing provisions, including the aspect pertaining to

security. Therefore, the Parties agree that ~~the~~ Storage Company shall be the Data Supervisor, in accordance with Article 1, Paragraph 2, Letter e) of the Law, with reference solely to the processing operations and solely to the data which the Storage Company shall be called upon to process in relation to the performance of the contractual obligations per the Storage Code.

In particular:

c) the Shipper shall prepare and send, at its own expense, the amendment to the notice to the Authority for the protection of personal data, per Articles 7 and 28 of the Law; the Shipper shall also fulfil the obligation to inform its Eligible Customers of the appointment of the Storage Company as Data Supervisor.

d) The Storage Company:

- shall process the Shipper's personal data lawfully and properly, in compliance with existing privacy regulations and within the limits of the processing carried out by the Shipper, as identified in the notice to the Authority per Article 7 and 28 of the Law;

- shall safeguard the Shipper's personal data in accordance with Articles 9 and 15 of the Law;

- shall identify - if necessary - the persons to appoint as persons in charge of processing, in accordance with Articles 8 and 19 of the Law, and, based on the subsequent appointment deed, it shall identify the instructions to be imparted to said persons, overseeing their work, in accordance with the combined provisions of the aforementioned articles;

- shall carry out only the data processing operations strictly necessary to fulfil its contractual obligations, such as preservation and computing. The Carrier shall perform the aforementioned processing operations in accordance with the purposes for the processing carried out by the Shipper. Moreover, the Carrier may not carry out any processing operation other than those mentioned, and the Shipper shall hold the Carrier harmless from any and all liability connected with processing operations for which the Shipper has exclusive responsibility. In this regard, the Carrier shall not be liable with respect to the collection of personal data and to the connected obligations - such as the collection of the data subjects' authorisation - as well as to the pertinence and accuracy of the data. The Shipper shall therefore be the sole responsible party with regard to any challenge pertaining to said activities;

- shall comply with the instructions given by the Shipper and shall not be liable for any violations deriving from incomplete or erroneous instructions given by

the Shipper, who therefore shall hold it harmless against any consequent or connected claim;

- shall allow the Shipper to exercise controlling power, in accordance with Article 8 of the Law;

- shall adopt the measures identified by the Shipper, directed at enabling the data subject effectively to exercise the rights prescribed by Article 13 of the Law, and shall facilitate said exercise, within the limits of its competence.

- shall meet without delay, at the Shipper's request, any requests submitted by the data subjects, in accordance with the aforementioned Article 13 and with Article 29, Paragraph 2, of the Law, always within the limits of the functional operations of the Data Supervisor;

- shall generally assure compliance with the Authority's prescriptions, within the limits of its competence.

The Storage Company may not adopt any autonomous decisions with regard to the aims and procedures of the processing. In case of need and urgency, the Storage Company shall inform the Shipper as soon as possible, so the Shipper may make the appropriate decisions. In any case, if the instructions of the Shipper, amendments to laws and/or regulations and prescriptions of the Authority entail additional costs and/or activities for the Carrier, the related costs shall be incurred exclusively by the Shipper.

The appointment of the Storage Company as Data Supervisor shall be effective throughout (and only for) the period of validity of the Contract between the Parties.

CHAPTER 18

MANAGEMENT OF SERVICE EMERGENCIES

18.1 FOREWORD

The chapter describes the procedures activated by the Storage Company in case of emergency situations due to transitional unforeseen conditions that interfere with normal operations, or that impose special constraints to its operation.
This chapter does not discuss the general emergencies, consequent to the lack of availability of Gas of the system, which shall be discussed in the next chapter.

18.2 GENERAL ORGANISATION

18.2.1 Emergency situations and definitions

Emergency situations are deemed to be all those situations that are outside the normal conduct of operations and that:

1. can present a risk for the safety of people and property;
2. are not controllable with locally available means;
3. do not have immediate consequences, but they can generate additional anomalies;
4. can affect the performance of the System.

Emergency situations can thus be subdivided in three categories:

a) Emergencies due to technical anomalies of the system (explosion, fire, uncontrolled eruption of a well; rupture of flowline; casualty or malfunction in facilities);
b) Emergencies due to technical anomalies on third party systems/facilities (electric grid black-out, delivery pressures below minimum technical limits);
c) Emergencies due to damages to the system as a result of natural events and/or sabotage (landslides, floods, overflows, earthquakes, etc.).

In the emergency plan prepared by the Storage Company, for each of the aforesaid situations that can constitute an exceptional foreseeable event, there are cards identifying the actions to be taken according to roles, and the priorities according to the emergency levels defined in Paragraph 18.2.2 of this chapter.

18.2.2 Emergency levels

The actions that each party called upon to manage the emergency shall take are a function of the severity of the emergency.
Therefore, in order to establish criteria for the immediate assessment of the emergency situation, three levels of emergency have been defined: Minor, Medium, Major.

18.2.2.1. Minor Emergency

A minor emergency situation exists when:

a) The means available on site are sufficient to rapidly solve the problem and/or
b) The immediate and future consequences are limited and/or
c) No impacts on Shippers' schedules are expected.

18.2.2.2. Medium Emergency

A medium emergency situation exists when:

a) The means available on site are not sufficient to solve the emergency rapidly and/or
b) While the consequences may be hard to measure right away, they could be important with regard to the safety of persons and property and/or
c) There is a reduction in the performance of the plant and storage needs to be managed in an integrated manner in order to minimise the impact on Shippers' schedules.

18.2.2.3. Major Emergency

A major emergency situation exists when:

a) The means available on site are not sufficient to solve the emergency and/or
b) The consequences with regard to the safety of persons and property are considered severe and/or
c) There is a total interruption of the performance of the plant and storage needs to be managed in an integrated manner in order to minimise the impact on Shippers' schedules.

18.3 MANAGEMENT OF THE EMERGENCY

An emergency situation during normal working hours is managed directly by the plant manager and by the Director in Charge who will define the level and activation of the emergency.

A situation of emergency outside normal working hours can be reported with the following procedures:

a) by anyone detecting an anomalous situation, who communicates it to the “toll-free” telephone number posted on the fences of the facilities, active 24 hours a day, answered by a radio operator, who will immediately contact the on-call function leader;
b) by the automatic system that calls the facility’s on-call personnel, both via voice call with a pre-recorded message, and via SMS (Short Message System). At least two operators are always on-call for each facility.

The contact persons to be contacted in case of emergency are available on the Website of the Storage Company.

Once an emergency report is received, the on-call function leader shall reach the operating district, whilst the facility’s on-call personnel shall reach the emergency site.

18.3.1 Roles and responsibilities

The **on-call function leader**:

a) assures the flow of information to the plant manager,
b) through on-site personnel, orders the necessary operations and the actions to secure the facilities, in the shortest possible time, in order to protect the safety of personnel and property;
c) manages the set-up of the storage sites according to Shippers’ schedules;
d) assures the flow of information to the other company functions and to the shippers and the other connected operators involved in the emergency in order to define, if necessary, the procedures for reducing/shutting off the gas;
e) if necessary, coordinates the use of the means necessary to solve the emergency, personally going to the site if the case warrants it;
f) manages communications to the Public Administration and the external Authorities in case of minor emergencies;
g) mobilises personnel and evacuation equipment (e.g. public rescue equipment) and sends them to the emergency site;
h) verifies the causes of the emergency and reports them;

i) as soon as possible, informs the Director in Charge.

The **facility's on-call person**:

a) reports to the on-call function leader all the information about the ongoing emergency, in order to define the operations and means necessary to solve the emergency;
b) carries out the operations necessary to secure the facilities or to minimise service outages;
c) ensures that the facility's personnel is safe;
d) requests the means necessary for the personnel's evacuation.

If the emergency has characteristics of a higher level (medium or major emergency), the on-call function leader immediately contacts the Director in Charge who directly takes over the management of the emergencies and summons the crisis reaction team to the operating district, consisting of the heads of the functions who are involved according to the ongoing emergency (Director in Charge; Technical Managers; Dispatching; Procurement; IT Services; Safety and Environment Function).

The Storage Company communicates to the AEEG, no later than 31 December of every year, a summary of the information about the service emergencies that took place in its own facilities during the previous Thermal Year.

Moreover, the Storage Company informs Shippers, through publication on its own Website, about the start, evolution and end of the emergency phase and any reduction in available Capacity as a result of the aforesaid emergency.

CHAPTER 19

PROCEDURES FOR SHIFTING FROM NORMAL OPERATING CONDITIONS TO GENERAL EMERGENCY CONDITIONS

19.1 FOREWORD

This chapter describes the procedures for shifting from normal operating conditions to conditions of general emergency declared by the Ministry of Economic Development in accordance with Article 8, Paragraph 7, of Italian Legislative Decree no. 164/100.

19.2 GAS EMERGENCY PROCEDURES

As established by Article 8, Paragraphs 1 and 2 of the Decree of 26 September 2001, a Technical Committee for Emergency and Monitoring of the gas system was instituted at the Ministry of Economic Development, to provide advice to the Ministry itself and to carry out the following duties:

a) Formulating proposals for the definition of possible emergency situations;
b) Identifying emergency reaction instruments;
c) Formulating proposals for the definition of the procedure and time line for the activation of these instruments;
d) Periodically monitor the operation of the gas system, in relation to emergency situations.

On 25 June 2004, the Ministry of Economic Development Decree, at the proposal of the Technical Emergency Committee, approved the “Emergency procedure to address shortfalls in the natural gas supply in case of unfavourable weather events”.
The Procedure defines the interventions and their sequence, and identifies the natural gas companies and the gas and electricity operators responsible for their implementation, to handle an emergency situation, in the overall balancing of the national natural gas system, which may occur as a result of unfavourable weather conditions.

If the aforesaid emergency conditions per Article 8.7 of the Legislative Decree occur, the Storage Company, for matters under its responsibility, shall adhere to the aforesaid gas emergency.

19.3 OBLIGATIONS OF THE PARTIES

If the storage companies have operated in accordance with the rules described in the Climatic Emergency Procedure, are not obligated to pay any penalty or indemnity to

Shippers who use the storage services either for contractual breaches directly or indirectly connected to the occurrence of the emergency situation, or for the damages which the Shippers may incur as a consequence of such breaches.

19.3.1 Authorised withdrawal of strategic gas and its replenishment

Shippers may be authorised by the MSE to use, in case of need, the strategic storage directly connected to their own network, in cases of:

a) interruption or reduction of imports from non-EU Countries,
b) interruption or reduction of imports from EU Countries and emergencies on the domestic gas pipeline network,
c) a globally cold winter season.

To secure the operation of the gas system, in case of withdrawal of volumes of strategic storage gas, the company that made use of them shall purchase from the owner of the gas intended for strategic storage a volume of gas equal to the withdrawn volume, under such conditions as to guarantee to the selling party the availability of financial means to reacquire an equivalent volume of gas and replenish it in the reservoir, no later than the subsequent injection phase.

CHAPTER 20

REVISION OF THE STORAGE CODE

20.1 FOREWORD

The chapter describes the procedure for revising the Storage Code, the times and procedures for submitting amendment requests and for the approval of the suggested changes.

The Storage Company uses its own Web portal to publish revision proposals and to manage the related consultation phases, keeping the involved parties constantly informed.

In the chapter, the following terminology will be adopted:

Amendment request: it is the amendment to the Code, prepared by one of the entitled parties in accordance with Article 4, Paragraph 4.1 of Resolution 55/09, as set out in Paragraph 20.3, and submitted to the Storage Company with adoption request.

Revision proposal: it is the proposal for revising the Code, prepared and submitted to consultation to the Storage Company, also as a result of the positive evaluation on the amendment request.

20.2 CONSULTATION COMMITTEE

The Consultation Committee is a single technical consultation body for all storage codes, expressing the interests of the system's users and operators.

The establishment of the Committee, its composition, organisation, and the minutes of the Committee meetings are published on the Website of the Major Storage Company, to which the Storage Company provides a link in its own Web page.

20.3 PARTIES ENTITLED TO SUBMIT AMENDMENT REQUESTS

The parties entitled to submit amendment requests to the Storage Company are:

a) the users of the service, individually or in association;
b) the other companies (as defined in Resolution no. 55/09, Article 1, point 1.1 a); and the trade associations of the distribution companies, limited to the issues in which they are directly involved.

20.4 ACCEPTABILITY REQUIREMENTS FOR AMENDMENT REQUESTS

Only proposals submitted in accordance with the provisions of this paragraph will be taken into consideration.

Every proposal for revising the Storage Code shall meet the following requirements to be deemed acceptable:

a) it shall be submitted in writing and in a specific format available on the Website of the Storage Company;
b) it shall be sent in advance via email to the address indicated on the Website;
c) it shall comprehensively described the nature of the change;
d) its shall be directed at improving the pursuit of the objectives of the Storage Code;
e) it shall be consistent with the regulations and laws in force;
f) it shall clearly indicate which parts (Chapter, paragraphs and subparagraphs) it will amend/abolish/influence.

It is possible to attach documentation in support of the amendment request submitted. The proposal is deemed acceptable if the Storage Company does not express itself on the matter within 10 working days from its receipt.

20.5 PROCEDURES FOR MANAGING AMENDMENT REQUESTS

Amendment requests may be submitted by the entitled parties per point 20.3 at any time during the thermal year.

No later than 20 days from the receipt of an amendment request, the Storage Company shall:

a) publish it on the Web portal for the related consultation process;
or
b) make it available to the Authority, together with a report illustrating the reasons that led the Storage Company not to submit it for consultation.

If the Authority also deems it appropriate to submit for consultation an amendment request made available for the purposes of point b) above, the Storage Company shall start the related process no later than 15 days from the date of receipt of a specific communication by the Authority.

20.6 PROCEDURE FOR REVISING THE STORAGE CODE

The proposal for revising the Code, once prepared by the company, also as a result of the positive evaluation on the amendment request received from one of the entitled parties, shall be published by the company itself and subjected to consultation, at any time during the thermal year.

The duration of the consultation phase is 45 days from the date of publication of the proposal on the Website of the Storage Company.

Within the scope of the consultation process, the Consultation Committee makes available its own opinion to the Storage Company.

The Storage Company also allows parties who are not on the Consultation Committee to submit their own observations on the published revision proposals.

No later than 20 days from the end of the consultation, the Storage Company makes available to the Authority the proposal for revising the Storage Code, together with:

a) a report illustrating the reasons on which the proposal is based;
b) the opinion of the Consultation Committee;
c) the observations received from the parties that are not on the Consultation Committee;
d) the changes made to the proposal as a result of the consultation process, and the reasons for them;
e) additional observations emerged during the consultation which the Storage Company chose not to adopt, with the related reasons.

If the proposals to update the Code have to be prepared by the Storage Company in compliance with decrees, resolutions or other instructions issued by the competent authorities that identify the general criteria, leaving it to the involved parties to define the specific procedures without the indication of a maximum time interval, said time interval shall be set to:

- 15 days from the publication of the instruction for the publication of the revision procedure on the web portal;
- 30 days for the conclusion of the consultation phase.

Moreover, in this case, the time available for the Storage Company to make available to the Authority the proposal for revising the network code, together with what is discussed above under points a),b),c),d),e), is reduced to 10 days from the end of the consultation phase.

The Storage Company shall evaluate the proposals to revise this Storage Codes according to the following criteria:

a) Consistency of the amendments with the reference regulatory content and with the principles of the Storage Code;
b) Degree of improvement of the functionalities of the Storage Code;
c) Extent of the implications on the operating management of the Storage System;
d) Impact on the Storage Company of the amendments requested and the related revision times with regard to the processes, organisation and information systems;
e) Economic impact in terms of benefits, costs and any investments.

If the implementation of an amendment request requires significant investments or increases in operating expenses, the Storage Company will highlight these economic aspects and the time line for implementation in the document it will submit to the Authority for approval.

The updated Storage Code is published by the authority on its own Website and becomes effective from the date of its publication.

The Storage Company updates and publishes the Storage Code on its own Website no later than 10 days from publication by the Authority and within the same deadline it sends the related communication to the users of the service.

GLOSSARY

Allocation	Process whereby the Gas, expressed in GJ, measured daily in Injection or Withdrawal is attributed to the Shipper for accounting purpose, also allowing to determine the stock;
Thermal Year	Period from 1 April of every year to 31 March of the following year;
Storage capacity	Capacity in terms of Space, Withdrawal Flow Rate and Injection Flow Rate;
Capacity Assigned (S, CE, CI)	Storage capacity to which the Shippers are entitled as a result of the assignment procedure, defined in accordance with Paragraphs 2.4.3 and 2.4.4 of Chapter 2, "Description of the storage facilities and of their operation" and with Paragraph 5.7 of the Chapter "Assignment of storage capacities".
Interruptible storage capacity	Storage capacity subject to interruptibility, with obligation for the Storage Company to provide advance notice.
Storage Code	The present document, including all the Annexes that constitute an integral and essential part thereof.
Assignment	Outcome of the process for the commitment of storage capacity
Storage Contract or Contract	Document whereby the contracting parties (the Storage Company and the Shippers) define the specific elements of the required storage service, regulated on the basis of the provisions per the Storage Code.
Cushion gas	Minimum indispensable quantity of gas present or inserted into the reservoirs during the storage phase, which it is necessary always to maintain in the reservoir and whose function is to enable the withdrawal of the remaining volumes without compromising the properties of the storage reservoirs over time.

Resolution	Resolution by the Authority no. 119 of 24 June 2005, "Adoption of guarantees for free access to the natural gas storage service, obligation of the parties that perform storage activities and rules for the preparation of storage codes", as amended
Bill	The new bill for storage concessions approved with Director's Decree of 04/02/2011
Escomas	Electronic System of Edison Stoccaggio which allows to manage assignment requests as well as the exchange of information via Internet between the Shipper and the Storage Company with regard to the commercial management of the Contract, as provided by this Code and available starting from 1 April 2011. The term ESCOMAS is used alternatively as Electronic System
Withdrawal	Withdrawal of Natural gas from the storage reservoirs
G_{Ug} Stock	Quantity of Working Gas, expressed in GJ, held by the Shipper in the System at the end of day g., determined in accordance with Chapter 8 "Balancing and replenishment of the Storage Sites".
Gas or Natural gas	Mix of hydrocarbons, comprising mainly methane and to a lesser extent ethane, propane and higher hydrocarbons. It may also contain some inert gases, including nitrogen and carbon dioxide;
Gas-Day G	A period of 24 consecutive hours that starts at 6 am of each calendar day and ends at 6 am of the next calendar day. For the purposes of this Code, reference is made to standard time;
Strategic gas	Gas present in the Storage System, intended for the performance of the strategic storage service, whose withdrawal is regulated by Ministerial Decree 26/09/01;
GJ	Giga Joule = 1,000,000,000 Joule (reference to the International System of Units)

Edison Stoccaggio Hub	Virtual hub of confluence of all storage concessions managed by the Storage Company, through which the reservation, assignment and Allocation of the capacities reserved by the Shippers will be managed.
Wobbe Index	Ratio between the Higher Heating Value of the Gas per unit of volume and the square root of its relative density in the same reference conditions;
Importing	The importing of natural gas produced in European Union Countries or produced in countries outside the European Union.
Injection	The injection of Natural gas into the storage reservoirs;
Maintenance Operations	All types of maintenance operations as defined in Chapter 13 “Scheduling and Managing Maintenance Operations”
Party or Parties	The Storage Company and the Shipper, respectively individually and collectively;
Withdrawal Period	Time interval between 1 November and 31 March
Injection Period	Time interval between 1 April and 31 October
Periods	Periods from 1 to 15 April and from 16 to 31 October
Electronic System	Electronic System of Edison Stoccaggio which allows to manage assignment requests as well as the exchange of information via Internet between the Shipper and the Storage Company with regard to the commercial management of the Contract, as provided by this Code and available starting from 1 April 2011. The term Electronic System is used alternatively as ESCOMAS
Withdrawal Flow Rate or Performance (PE)	Daily peak withdrawal performance available, depending on the case, for the System or for the Shipper to whom a CE Capacity has been assigned and defined in subparagraphs 2.4.3.3, 2.4.4 and 2.4.5 of the chapter “Description of the facilities and of their operation”

Injection Flow Rate or Performance (PI)	Daily peak injection performance available, depending on the case, for the System or for the Shipper to whom a CE Capacity has been assigned and defined in subparagraphs 2.4.3.3, 2.4.4 and 2.4.5 of the chapter "Description of the facilities and of their operation"
Certified Electronic Mail	In accordance with Italian Presidential Decree no. 68 of 11 February 2005, this is "any electronic mail system in which the sender is provided with electronic documentation certifying the transmission and delivery of electronic documents".
Higher Heating Value (HHV)	Quantity of energy expressed in Megajoule (MJ) produced by the complete combustion, at constant pressure, of one cubic metre of Gas in anhydrous air at the pressure of 1.01325 x 100000 Pa, and at the temperature of 15°C, when all the water formed by combustion is condensed to the liquid state.
Average Contractual Pressure	Value of pressure below which the daily performance could be reduced
Minimum Contractual Pressure	Value of pressure below which the daily performance could be interrupted altogether
Minimum Contractual Pressure at Redelivery Point	Minimum value of pressure at which the Storage Company undertakes to deliver the Gas to the Shipper at the Redelivery Point
Performance or Peak	The Injection or the Withdrawal provided by the Storage Company to the Shipper, depending on the case
Daily Performance	The daily Injection or the daily Withdrawal provided by the Storage Company to the Shipper, depending on the case

Delivery point	Physical point, corresponding to the inlet flange, upstream of the measuring system of any one of the storage facilities comprising the Storage System, in which the Gas is entrusted in custody from the Shipper to the Storage Company;
Delivery Point	Aggregation of all Delivery points comprising the Storage System
Redelivery point	Point, corresponding to the outlet flange, downstream of the measuring system of any one of the storage facilities comprising the Storage System, in which the Gas is entrusted in custody from the Storage Company to the Shipper
Redelivery Point	Aggregation of all redelivery points comprising the Storage System
Access Request	Request submitted by the Shipper to access the Storage System and use the Storage Services
Request for access to the Electronic System	Request submitted to be able to access the Electronic System of Edison Stoccaggio.
SCS	Overall System Imbalance as defined by Res. ARG/GAS 45/11 as amended
Storage service	Services offered by the Storage Company
Storage System or System	The set of all storage sites managed by the Storage Company;
Website	www.edisonstoccaggio.it
Space	Storage capacity as defined in subparagraph 3.4.1 of the chapter "Description of the services
Shipper	Party that stipulates with the Storage Company the Contract for the performance of the storage services
Strategic Shipper	Party charged for the Strategic Storage Service per Article 12, Paragraph 11-*bis* of Italian Legislative Decree no. 164/2000 and related implementing decrees

Working Gas	The quantity of gas present in the reservoirs during the storage phase which can be made available and replenished to be used for the Storage Services, including the part of gas producible but in longer times than those required by the market, which is essential to assure the peak performance that can be required by the variability of demand in daily and hourly terms.

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Tel. +39 02 6222.1

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