

**Update of Sections 7 and 8 of the Load
Balancing – Year 2012**

December 2011

Introduction

This update of sections 7 and 8 of the Load Balancing for the year 2012 is developed in terms of Paragraph 2.c of Article 68 of Law 4001/2011, according to which the Hellenic Gas Transmission System Operator (DESFA) S.A. has the responsibility for balancing the load of the National Natural Gas System (NNGS) as defined in the Network Code, and it is submitted to the Energy Regulatory Authority (RAE), under the terms of subparagraph A of paragraph 1 of Article 46 of NNGS Network Code, according to which the Load Balancing and any update thereto, is adapted by RAE and published under the responsibility of the Operator.

As for the update of section 7 of Load Balancing for 2012, it is noted that it is necessary, due to that RAE didn't approve the Operator's proposal for the methodology of calculation of the LNG Regasification Capacity needed to be booked for Balancing purposes in the Resolution 1216/2011 of RAE.

As for the update of section 8 of Load Balancing for 2012, it is noted that it is necessary, because of the projected in the Operator's Procurement Regulation and the relevant legislation and deadlines, it is not possible to complete the bidding process of the bid No. 278/2011 that was launched by the Operator for the procurement of Balancing Gas for the Year 2012, as indicated in section 8 of the approved by RAE mentioned decision Load Balancing for 2012.

According to the above, sections 7 and 8 of the Load Balancing for 2012, are amended as follows:

Section 7: Capacity Reservation in LNG Facility for Load Balancing in 2012

The Operator reserves capacity at the LNG Facility for load balancing of the Users (GC) as Gasification Capacity that is calculated according to the methodology of Annex I of the Resolution No. 2129/2008 of RAE, as amended in the Annex I of the Resolution No. 3294/2009 of RAE:

$$GC_Y = OA_Y * RTC_Y$$

Where,

$$OA_Y = \frac{\frac{AQ_{BAL_{\max}(y-1)}}{RTC_{(y-1)}} + \frac{AQ_{BAL_{\max}(y-2)}}{RTC_{(y-2)}} + \frac{AQ_{BAL_{\max}(y-3)}}{RTC_{(y-3)}}}{3},$$

$AQ_{BAL_{\max}}$: the maximum Daily Quantity of Load Balancing used by the Operator during each Year, considering any special cases of non-regular operation of NNGS, particularly in

Emergency cases, and

RTC : the sum of Reserved Transmission Capacity that is reserved by all Users, according to the Transmission Contracts in use that are conducted and signed with the Operator to the day of calculating GC (MWh/Day).

According to the Resolutions No. 2129/2008 and No. 3294/2009, RAE considers the following:

1. For load balancing purposes the Operator reserves part of the gasification capacity of LNG Facility and equal transmission capacity at the relevant Entry Point "Agia Triada".
2. While exercising its powers, the Operator must reserve the absolutely necessary NNGS capacity, so as to ensure the task of providing balancing services to Users and to maximize the NNGS available capacity for reservation of Users.
3. For the reservation of capacity at LNG Facility for balancing purposes, the Operator doesn't take under consideration the maximum quantity of balancing gas demanded during the Russian – Ukrainian crisis in January 2009.
4. The Operator during calculations for reservation of capacity at the LNG Facility considers the special conditions of non-regular NNGS operation because the inclusion of data from these special conditions would result in a major limitation of the available capacity to the Users.

According to the above, the Operator proposes that the reservation of LNG Facility Capacity (GC_{2012}), for load balancing for the Year 2012 should be 48,123MWh/Day, as follows:

$$GC_{2012} = OA_{2012} * RTC_{(29.10.2011)} = 0.166 * 289,897 = 48,123 \text{ MWh/Day}$$

where for the calculation of OA_{2012} the following parameters were taken under consideration:

Date	26/04/2011	06/12/2010	06/04/2009
$AQ_{BAL_{max}} (MWh)$	42,489.075	52,251.056	37,574.983
$RTC(MWh)$	280,689.363	293,189.363	222,683.257

It is noted that for the calculation of the reservation of LNG facility balancing (GC) the quantities $AQ_{BAL_{max(2010)}} = 94,041.118 \text{ MWh/Day}$ και $AQ_{BAL_{max(2009)}} = 62,530.431 \text{ MWh/Day}$ that happened at 25.01.2011 and 25.08.2009 were not taken into account, because those days were considered as special conditions of non-regular operation of NNGS, according to the Resolution No. 3294/2009 of RAE that would significantly reduce the available capacity of

Users.

Section 8: Balancing Contract

Taking into account:

- i. the topology and the construction properties of the National Natural Gas Transmission System,
- ii. the technical, reserved and available capacity of the Entry Points of the National Natural Gas Transmission System,
- iii. the geographical distribution of consumption in the National Natural Gas System,
- iv. the progress in the expansion and upgrade projects in the National Natural Gas System,
- v. the start of the commercial operation of the N. Mesimvria compressor, which, for the time being, is considered to take place the first quarter of the Year 2012 and not earlier than February 1st of the Year above,
- vi. the connection of new consumers in the south part of the National Natural Gas System

it is considered appropriate for the safe, smooth and efficient operation of the National Natural Gas System, the injection of Balancing Gas through the Entry Point "Agia Triada".

Aiming the orderly, economical and efficient operation of the NNGS, during the Year 2012, the Operator will:

A) obtain Balancing gas for the period 01.01.2012 08:00 – 01.05.2012 08:00 from the company DEPA S.A., under the provisions of paragraph 1 of Article 91 of Law 4001/2011

B) conclude a contract for the supply of Balancing Gas, for the period 01.05.2012 08:00 – 01.01.2013 08:00 with a Natural Gas supplier that will be selected after carrying out an international bid, as specified in Article 68, Paragraph 2.c of Law 4001/2011.

Due to:

- the restricted storage capacity of the LNG Facility,
- the ever increasing demand (from Users' sides) for access to the LNG Facility,
- the requirements in the Network Code of NNGS and particularly in Chapter 11 for the terms of

access to the LNG Facility (Temporary Storage Period. Minimum Regasification Capacity),

- the size of LNG container vessels that are available in the LNG Market,

in the LNG supply Contract, among others, the authority of the Operator to specify the LNG quantity and the time delivery for balancing purposes will be established, so that the smooth operation of the Greek Natural Gas market is not upset, in accordance with the requirement of the Network Code of NNGS, without imposing restrictions such as minimum supply quantity or payment clauses irrespective of LNG off-takes.

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