



**Suggestion on the part of the NNGS Capacity Reservation in LNG
Facility for Load Balancing in 2013**
(Revision: 2)

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The present paper is drawn up under the provisions of the of paragraph 1 of article 46 of the Network Code for the Regulation of the NNGS, according to which the NNGS Operator (DESFA S.A.) proposes to the Regulatory Authority for Energy (RAE) on the part of the booked NNGS Capacity by the Operator for Balancing Gas, according to the provisions of the paragraph 3 of the article 71 of the Law 4001/2011.

According to the Decision No. 842/2012 of RAE, with which RAE approved the National Natural Gas Transmission System (NNGTS) Annually Design for Balancing Gas for the Year 2013, the Balancing Gas injection to the NNGTS will be done via the Entry Point "AGIA TRIADA".

The Operator, taking into account (i) the approved Pricing Regulation, which is active since 01.02.2013, (ii) the strong variation of the required Daily Natural Gas quantities during a Year and (iii) special cases of abnormal operation of the NNGS during the last three (3) Years, i.e. from 01.01.2010 08:00 to 01.01.2013 08:00, proposes the methodology of determining the portion of the NNGS Capacity that should be booked for Balancing Gas during the Year 2013, considering the NNGS efficient and economic operation and improve the level of provided Transmission services and LNG Facility Use to the User. Below, the estimated maximum Daily quantity of Balancing Gas per Month for the Year 2013 is presented, considering the seasonal variations shown, the historical data, that size and accordingly determines the LNG Regasification Capacity and the Deliveries Transmission Capacity that should be booked in the Entry Point "AGIA TRIADA" for Balancing purposes per Month in the Year 2013. In this way the portion of NNGS that needs to be booked for Balancing Gas purposes during that year is estimated with the utmost precision and the available, for the Users, Transmission and Regasification Capacity is maximized.

The Operator, taking into account the historical data of thirty-six (36) Months (see Appendix) of the period from 01/2010 to 12/2012 and correlating the Daily Balancing Gas Quantity per Month with the corresponding sum of the Users Booked Transmission Capacity, recommends the application of the following methodology for the calculation of the Monthly Booked LNG Regasification Capacity and the Delivery Transmission Capacity in the Entry Point "AGIA TRIADA" for Balancing Gas During the Year 2013:

$$\Delta E_{M,2013} = OA_{M,2013} * E\Delta M_{M,2013}$$

where:

- $OA_{M,2013} = \frac{\frac{AQ_{EE(max)_{M,2012}}}{\Delta M_{M,2012}} + \frac{AQ_{EE(max)_{M,2011}}}{\Delta M_{M,2011}} + \frac{AQ_{EE(max)_{M,2010}}}{\Delta M_{M,2010}}}{3}$
- $AQ_{EE(max)_{M,Y}}$: the maximum Daily Balancing Gas Quantity (MWh/Day) used by the Operator during the Month M of the Year Y,
- $\Delta M_{M,Y}$: the sum of the Booked Transmission Capacity (MWh/Day) that was booked by all Users, according to the Transmission Contracts that were signed with the Operator, during the Day of the maximum Daily Balancing Gas Quantity during the Month M of the Year Y, and
- $E\Delta M_{M,2013} = \frac{(\Delta M_{M,2012} + \Delta M_{M,2011} + \Delta M_{M,2010})}{3}$.

Based on the above methodology, the Operator proposes the Monthly Regasification Capacity Booking at the LNG Facility ($\Delta E_{M,2013}$) and equal Transmission Capacity at the relevant Entry Point “AGIA TRIADA”, for Balancing Gas purposes during the Year 2013, according to the following Table:

Month of Year 2013	Monthly Regasification Capacity Booking at the LNG Facility and equal Transmission Capacity at the relevant Entry Point “AGIA TRIADA” ($\Delta E_{M,2013}$) (MWh/Day)
January	51,716.036
February	30,605.297
March	26,887.344
April	19,578.675
May	20,662.197
June	17,473.002
July	26,602.621
August	28,735.567
September	16,834.307
October	19,247.305
November	19,128.926
December	35,157.277

APPENDIX
Historical Data of Maximum Balancing Gas Quantity and Users Booked Transmission Capacity

Month	Year	Historical Data of Maximum Balancing Gas Quantity (MWh/Day)	Sum of all Users Booked Transmission Capacities during the Day of the Maximum Balancing Gas Quantity (MWh/Day)
January	2010	48,824.755 ¹	263,068.363
	2011	38,150.627	306,689.363
	2012	68,488.174	321,898.073
February	2010	16,888.278	263,068.363
	2011	29,867.576	315,189.363
	2012	47,412.710 ²	321,898.073
March	2010	18,320.321	263,068.363
	2011	36,860.353	315,189.363
	2012	26,285.920	328,057.237
April	2010	9,312.623	282,689.363
	2011	42,489.075	280,689.363
	2012	7,525.117	263,889.237
May	2010	22,880.766	285,831.673
	2011	21,105.546	280,689.363
	2012	18,105.618	306,529.529
June	2010	8,569.442	282,774.193
	2011	30,639.622	280,587.603
	2012	12,737.126	282,106.059
July	2010	33,373.607	282,774.193
	2011	26,087.127	280,587.603
	2012	18,356.632	343,545.755
August	2010	28,228.927	293,274.193
	2011	36,060.938	280,587.603
	2012	19,662.496	343,230.755
September	2010	15,405.932	293,274.193
	2011	15,415.263	280,587.603
	2012	19,835.461	327,976.059
October	2010	37,966.397	293,189.363
	2011	12,376.002	299,897.073
	2012	7,383.802	281,791.059
November	2010	19,955.466	293,189.363
	2011	30,910.846	307,893.100
	2012	7,396.172	281,791.059
December	2010	52,251.056	293,189.363
	2011	25,482.058	329,897.073
	2012	25,959.609	302,105.059

¹ Note that the Balancing Gas quantity on 25.01.2010, i.e. 94,041.118 MWh was not taken into account due to abnormal NNGS operation during that Day and the next Balancing Gas value of 48,824.755 MWh, held on 24.01.2010 was used for the calculations.

² Note that the Balancing Gas quantity on 03.02.2012, i.e. 66.590,310 MWh was not taken into account due to assessment of Emergency in the NNGS during that Day and the next Balancing Gas value of 47,412.710 MWh, held on 07.02.2012 was used for the calculations.