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DECISION 512/2021

Approval of Tariffs for the Hellenic Gas Transmission System Operator S.A. (DESFA) applying of the provisions of paragraph 5 of Article 88 of Law 4001/2011, as in force

TARIFFS FOR USE OF THE NATIONAL GAS SYSTEM**1. Natural Gas Demand** (Article 9, Paragraph 7, Tariffs Regulation)

The following Tables present the expected natural gas and LNG demand for the year 2022, which is used for the calculation of tariffs for the use of NNGS.

	Daily peak of Quantity delivered to each Entry Point (Nm ³ / day / year)		Daily peak of Quantity received by each Exit Point (Nm ³ / day / year)			Daily peak of LNG Quantity to be regasified in the LNG facility (Nm ³ / day / year)
Year	Sidirokastro-Kipi-Nea Messimvria	Agia Triada	North Zone	South Zone	Sidirokastro-(exit Point Reverse Flow)	LNG Facility
2022	15.100.000	12.500.000	7.332.036	29.289.561	1.740.000	12.500.000

	Sum of Quantities received by each Exit Point (Nm ³ / year)
2022	6.252.514.901

2.Required Revenue (Article 3A, Tariffs Regulation)

Required Revenue (€ / Year)			
Year	Transmission Activity	LNG Activity	Total
2022	98.416.388	39.795.811	138.212.199

Required Revenue – Transmission Services (€ / Year)			
Year	Required Revenue allocated to Entries	Required Revenue allocated to Exits	Total
2022	49.208.194	49.208.194	98.416.388

3. Regulated Asset Base (Article 4, Paragraph 1 of Tariffs Regulation)

Regulated Asset Base (€ / Year)			
Year	Transmission Activity	LNG Activity	Total
2022	490.228.106	240.178.935	730.407.041

4. Regulated Assets' Depreciation (Article 7, Paragraph 3 of Tariffs Regulation)

Projected Regulated Assets' Depreciation per Basic Activity (€ / Year)			
Year	Transmission Activity	LNG Activity	Total
2022	27.470.393	10.176.422	37.646.815

The projected Regulated Assets' Depreciation of the Non-Transmission Activities and of Additional LNG Activities are equal to zero (0) for 2022.

5. Regulated Operating Expenses (Article 7A, Paragraph 7 of Tariffs Regulation)

Estimated Regulated Operating Expenses (€ / Year)			
Year	Transmission Activity	LNG Activity	Total
2022	34.473.024	11.750.076	46.223.100

6. The LNG Facility Dispersion Percentage (SocLNG) (Article 8, Paragraph 4 of the Tariffs Regulation)

It is defined equal to fifty percent (50%).

7. Allowed Revenue of each Activity and of each Entry and Exit of the Transmission System (Article 8A, Paragraph 5 of Tariffs Regulation)

Allowed Revenue for each Activity (€ / Year)					
Year	Allowed Revenue of Transmission Activity	Allowed Revenue of LNG Activity	Allowed Revenue of LNG Dispersion	Recovery of Old Recoverable Difference	Total Allowed Revenue
2022	93.882.153	18.031.023	18.031.023	10.887.273	140.831.472

Allowed Revenue from Transmission Services allocated in Entries and Exits (€ / Year)			
Year	Allowed Revenue for Transmission Entries	Allowed Revenue for Transmission Exits (Part A)	Total
2022	44.673.959	49.208.194	93.882.153

Allowed Revenue of Transmission Exits (€ / Year)			
Year	Allowed Revenue for Exits (Part A)	Allowed Revenue for Exits (Part B)*	Total
2022	49.208.194	10.887.273	60.095.467

* Equal to the amount of the Old Recoverable Difference to be recovered in 2022. It is recovered through commodity charges of the Transmission exits

8. Old Recoverable Difference of the NNGS (Article 19B, Paragraph 5 of Tariffs Regulation)

The following table shows the amounts of the Old Recoverable Difference to be recovered in each Year of the Regulatory Period 2019-2022 from the Exits (€ / Year). According to the actual figures for the year 2020 the Recoverable Difference of 2020 in the exits (actual regulated income, _{exits} minus actual Allowed Revenue, _{exits}) is equal to € 6,817,373 (the above amount is an over-recovery) and corresponds to 10% of NNGS actual Allowed Revenue of the same Year (the latter amounts to € 68,639,491). According to Par. 3 of the Article 19B of the Tariff Regulation, the Recoverable Difference in the exits may be limited by a maximum of ten percent (10%) of the Allowed Revenue in the exits (A) and (B). RAE decided to consider zero percentage (0%) in terms of the limitation % of the over-recovery to be settled through the Old Recoverable Difference, with the aim to maximize the rationalization of the TSO's revenues' parameters due from the past, within the provided limitations under Tariff Regulation. Consequently, the total Recoverable Difference of the exits for 2020 is deducted from the Old Recoverable Difference, as suggested by the TSO.

€	2016	2017	2018	2019	2020	2021	2022
Remaining Old Recoverable Difference amount 01.01		325.840.794	266.549.423	227.285.757	154.805.178	131.081.482	119.760.003
Minus: Recovered amount of Old RD		-3.000.000	-23.600.000	-16.234.697	-16.906.323	-11.560.521	-10.887.273
Minus: Amount of RD of the Year (over-recovery) offset with the remaining amount of the Old RD in the end of the same year		-67.873.098	-25.303.508	-62.395.723	-6.817.373		
Plus: Yearly adjustment of the remaining amount		4,54%	4,43%	4,14%	0,00%	0,20%	0,80%
Remaining Old Recoverable Difference amount 31.12	325.840.794	266.549.423	227.285.757	154.805.178	131.081.482	119.760.003	109.743.712

9. Coefficients for the calculation of the Transmission and LNG Facility tariffs

(Article 11, Tariffs Regulation)

Tariff Coefficients for the year 2022:

The discount factor (c) is set equal to 30%.

COEFFICIENTS FOR THE RESERVED CAPACITY CHARGE, COEFFICIENT FOR THE DISPERSION OF LNG & COEFFICIENT FOR THE REGASIFICATION CAPACITY

A1) for the Transmission System for each Entry

2022	SDM, €/(kWh GCV /Hour/Year)
Entry Sidirokastro – Kipi - Nea Messimvria	4,1717691
Exit Sidirokastro*	4,1717691
Entry Agia Triada	1,3247007

* The use as an Exit Point of an Entry Point which is also an Inter-connection Point and vice versa, it is charged with the charge rates of the respective Input, pursuant to Paragraph 6 of Article 9 of the Tariffs Regulation.

A2) for the Transmission System for each Exit

2022	SDM €/kWh GCV /Hour/Year)	SDDY €/kWh GCV /Hour/Year)	TOTAL €/kWh GCV /Hour/Year)
North Zone	2,7290326	1,0287738	3,7578065
South Zone	3,0732256	1,0287738	4,1019994

A3) LNG Facility

2022	SDY €/kWh GCV /Hour/Year)
LNG Terminal	2,9684484

B) COEFFICIENTS FOR THE COMMODITY CHARGE

B1) for the Transmission System for each Exit.

2022	SEM, €/kWh GCV
Exit North Zone	0,0001516
Exit South Zone	0,0001516

10. Short-term multipliers B

The short-term coefficients (B) will be kept at the levels of 2022 for all the entry and exits points.

A) SHORT TERM CHARGE MULTIPLIERS B FOR THE ENTRY “SIDIROKASTRO – KIPI – NEA MESIMVRIA”

Daily Product	Monthly Product	Quarterly Product	Yearly Product
2,9714	1,4799	1,3795	1

B) SHORT TERM MULTIPLIERS B FOR THE ENTRY “AGIA TRIADA” AND FOR THE BASIC ACTIVITY OF LNG FACILITY

For smoothing the short -term multipliers B in order to avoid any instability in the market, taking into account that in the Entry Agia Triada and in Revithoussa the booking profile is highly dependent on the maximum period of LNG temporary storage according to the NNGS Management Code (18 days), two distinct functions are established according to the duration of the short-term capacity booking.

1. For number of days $1 \leq d < 18$

The multiplier B is calculated based on the function $B(d) = a \cdot d + b$, where a, b are constant parameters and d is the duration of the Short-term Contract in Days for the use of the Entry “Agia Triada” or the use of the LNG Facility. The parameters for calculating the Multiplier B are defined as:

$$a = 0,0865507$$

$$b = 3,0579123$$

2. For number of days $18 \leq d < 365$

The multiplier B is calculated based on the function: $B_{(d)} = a \cdot e^{-bd}$, ($B_{d>365} = 1$)

where a, b are constant parameters and d is the duration of the Short-term Contract in Days for the use of the Entry "Agia Triada" or the use of the LNG Facility.

Where, a, b fixed rates and d the validity period of the Short Term in Days for the use of the Agia Triada Entry and the LNG Terminal.

The parameters for calculating the factor B are defined as:

$$a = 1,5327293$$

$$b = 0,00117$$

The following table presents the values of multipliers B, according to the number of Days of the Short-Term Contract.

d	B(d)	d	B(d)	d	B(d)	d	B(d)	d	B(d)	d	B(d)	d	B(d)
1	2,9714	61	1,4272	121	1,3304	181	1,2402	241	1,1561	301	1,0778	361	1,0047
2	2,8848	62	1,4255	122	1,3288	182	1,2388	242	1,1548	302	1,0765	362	1,0035
3	2,7983	63	1,4238	123	1,3273	183	1,2373	243	1,1534	303	1,0752	363	1,0023
4	2,7117	64	1,4221	124	1,3257	184	1,2359	244	1,1521	304	1,0740	364	1,0012
5	2,6252	65	1,4205	125	1,3242	185	1,2344	245	1,1507	305	1,0727	365	1,0000
6	2,5386	66	1,4188	126	1,3226	186	1,2330	246	1,1494	306	1,0715		
7	2,4521	67	1,4172	127	1,3211	187	1,2315	247	1,1480	307	1,0702		
8	2,3655	68	1,4155	128	1,3195	188	1,2301	248	1,1467	308	1,0690		
9	2,2790	69	1,4139	129	1,318	189	1,2287	249	1,1454	309	1,0677		
10	2,1924	70	1,4122	130	1,3165	190	1,2272	250	1,1440	310	1,0665		
11	2,1059	71	1,4106	131	1,3149	191	1,2258	251	1,1427	311	1,0652		
12	2,0193	72	1,4089	132	1,3134	192	1,2243	252	1,1413	312	1,0640		
13	1,9328	73	1,4073	133	1,3119	193	1,2229	253	1,1400	313	1,0627		
14	1,8462	74	1,4056	134	1,3103	194	1,2215	254	1,1387	314	1,0615		
15	1,7597	75	1,4040	135	1,3088	195	1,2201	255	1,1373	315	1,0602		
16	1,6731	76	1,4023	136	1,3073	196	1,2186	256	1,1360	316	1,0590		
17	1,5866	77	1,4007	137	1,3057	197	1,2172	257	1,1347	317	1,0578		
18	1,5008	78	1,3990	138	1,3042	198	1,2158	258	1,1334	318	1,0565		
19	1,4990	79	1,3974	139	1,3027	199	1,2144	259	1,1320	319	1,0553		
20	1,4973	80	1,3958	140	1,3012	200	1,2129	260	1,1307	320	1,0541		
21	1,4955	81	1,3941	141	1,2996	201	1,2115	261	1,1294	321	1,0528		
22	1,4938	82	1,3925	142	1,2981	202	1,2101	262	1,1281	322	1,0516		
23	1,4920	83	1,3909	143	1,2966	203	1,2087	263	1,1268	323	1,0504		
24	1,4903	84	1,3893	144	1,2951	204	1,2073	264	1,1254	324	1,0491		
25	1,4885	85	1,3876	145	1,2936	205	1,2059	265	1,1241	325	1,0479		
26	1,4868	86	1,3860	146	1,292	206	1,2045	266	1,1228	326	1,0467		
27	1,4851	87	1,3844	147	1,2905	207	1,2030	267	1,1215	327	1,0455		
28	1,4833	88	1,3828	148	1,289	208	1,2016	268	1,1202	328	1,0442		
29	1,4816	89	1,3812	149	1,2875	209	1,2002	269	1,1189	329	1,0430		
30	1,4799	90	1,3795	150	1,286	210	1,1988	270	1,1176	330	1,0418		
31	1,4781	91	1,3779	151	1,2845	211	1,1974	271	1,1163	331	1,0406		
32	1,4764	92	1,3763	152	1,283	212	1,1960	272	1,1150	332	1,0394		
33	1,4747	93	1,3747	153	1,2815	213	1,1946	273	1,1136	333	1,0381		
34	1,4730	94	1,3731	154	1,28	214	1,1932	274	1,1123	334	1,0369		
35	1,4712	95	1,3715	155	1,2785	215	1,1918	275	1,1110	335	1,0357		
36	1,4695	96	1,3699	156	1,277	216	1,1904	276	1,1097	336	1,0345		
37	1,4678	97	1,3683	157	1,2755	217	1,1891	277	1,1084	337	1,0333		
38	1,4661	98	1,3667	158	1,274	218	1,1877	278	1,1072	338	1,0321		
39	1,4644	99	1,3651	159	1,2725	219	1,1863	279	1,1059	339	1,0309		
40	1,4626	100	1,3635	160	1,2711	220	1,1849	280	1,1046	340	1,0297		
41	1,4609	101	1,3619	161	1,2696	221	1,1835	281	1,1033	341	1,0285		
42	1,4592	102	1,3603	162	1,2681	222	1,1821	282	1,1020	342	1,0273		
43	1,4575	103	1,3587	163	1,2666	223	1,1807	283	1,1007	343	1,0261		
44	1,4558	104	1,3571	164	1,2651	224	1,1794	284	1,0994	344	1,0249		
45	1,4541	105	1,3555	165	1,2636	225	1,1780	285	1,0981	345	1,0237		
46	1,4524	106	1,3540	166	1,2622	226	1,1766	286	1,0968	346	1,0225		
47	1,4507	107	1,3524	167	1,2607	227	1,1752	287	1,0956	347	1,0213		
48	1,4490	108	1,3508	168	1,2592	228	1,1739	288	1,0943	348	1,0201		
49	1,4473	109	1,3492	169	1,2577	229	1,1725	289	1,0930	349	1,0189		
50	1,4456	110	1,3476	170	1,2563	230	1,1711	290	1,0917	350	1,0177		
51	1,4439	111	1,3461	171	1,2548	231	1,1697	291	1,0904	351	1,0165		
52	1,4423	112	1,3445	172	1,2533	232	1,1684	292	1,0892	352	1,0153		
53	1,4406	113	1,3429	173	1,2519	233	1,1670	293	1,0879	353	1,0141		
54	1,4389	114	1,3413	174	1,2504	234	1,1656	294	1,0866	354	1,0130		
55	1,4372	115	1,3398	175	1,2489	235	1,1643	295	1,0853	355	1,0118		
56	1,4355	116	1,3382	176	1,2475	236	1,1629	296	1,0841	356	1,0106		
57	1,4338	117	1,3366	177	1,246	237	1,1616	297	1,0828	357	1,0094		
58	1,4322	118	1,3351	178	1,2446	238	1,1602	298	1,0815	358	1,0082		
59	1,4305	119	1,3335	179	1,2431	239	1,1588	299	1,0803	359	1,0070		
60	1,4288	120	1,3320	180	1,2417	240	1,1575	300	1,0790	360	1,0059		

C) SHORT TERM MULTIPLIERS B FOR THE EXITS OF THE TRANSMISSION SYSTEM

The multiplier B is calculated based on the function: $B_{(d)} = a \cdot e^{-bd}$, ($B_{d>365} = 1$)

where a, b are constant parameters and d is the duration of the Short-term Contract in Days for the use of the Exits of Transmission System. Multipliers B are the same for the two Exits of the Transmission System. The parameters for the calculation of the multiplier B are:

a= 3,880929

b= 0,003715

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The table below shows the values of Multiplier B, respectively with the number of Short-Term Days.

d	B(d)	d	B(d)	d	B(d)	d	B(d)	d	B(d)	d	B(d)	d	B(d)
1	3,8665	61	3,0940	121	2,4758	181	1,9811	241	1,5853	301	1,2685	361	1,0151
2	3,8522	62	3,0825	122	2,4666	182	1,9738	242	1,5794	302	1,2638	362	1,0113
3	3,8379	63	3,0711	123	2,4575	183	1,9664	243	1,5735	303	1,2591	363	1,0076
4	3,8237	64	3,0597	124	2,4484	184	1,9592	244	1,5677	304	1,2545	364	1,0038
5	3,8095	65	3,0483	125	2,4393	185	1,9519	245	1,5619	305	1,2498	365	1,0000
6	3,7954	66	3,0370	126	2,4302	186	1,9447	246	1,5561	306	1,2452		
7	3,7813	67	3,0258	127	2,4212	187	1,9374	247	1,5503	307	1,2406		
8	3,7673	68	3,0146	128	2,4122	188	1,9303	248	1,5446	308	1,2360		
9	3,7533	69	3,0034	129	2,4033	189	1,9231	249	1,5389	309	1,2314		
10	3,7394	70	2,9922	130	2,3944	190	1,9160	250	1,5332	310	1,2268		
11	3,7255	71	2,9812	131	2,3855	191	1,9089	251	1,5275	311	1,2223		
12	3,7117	72	2,9701	132	2,3767	192	1,9018	252	1,5218	312	1,2177		
13	3,6980	73	2,9591	133	2,3678	193	1,8947	253	1,5162	313	1,2132		
14	3,6842	74	2,9481	134	2,3591	194	1,8877	254	1,5105	314	1,2087		
15	3,6706	75	2,9372	135	2,3503	195	1,8807	255	1,5049	315	1,2042		
16	3,6570	76	2,9263	136	2,3416	196	1,8737	256	1,4994	316	1,1998		
17	3,6434	77	2,9154	137	2,3329	197	1,8668	257	1,4938	317	1,1953		
18	3,6299	78	2,9046	138	2,3243	198	1,8599	258	1,4883	318	1,1909		
19	3,6164	79	2,8939	139	2,3156	199	1,8530	259	1,4827	319	1,1865		
20	3,6030	80	2,8831	140	2,3071	200	1,8461	260	1,4772	320	1,1821		
21	3,5897	81	2,8724	141	2,2985	201	1,8393	261	1,4718	321	1,1777		
22	3,5764	82	2,8618	142	2,29	202	1,8324	262	1,4663	322	1,1733		
23	3,5631	83	2,8512	143	2,2815	203	1,8256	263	1,4609	323	1,1690		
24	3,5499	84	2,8406	144	2,273	204	1,8189	264	1,4554	324	1,1646		
25	3,5367	85	2,8301	145	2,2646	205	1,8121	265	1,4501	325	1,1603		
26	3,5236	86	2,8196	146	2,2562	206	1,8054	266	1,4447	326	1,1560		
27	3,5105	87	2,8091	147	2,2478	207	1,7987	267	1,4393	327	1,1517		
28	3,4975	88	2,7987	148	2,2395	208	1,7920	268	1,4340	328	1,1475		
29	3,4846	89	2,7883	149	2,2312	209	1,7854	269	1,4287	329	1,1432		
30	3,4716	90	2,7780	150	2,2229	210	1,7788	270	1,4234	330	1,1390		
31	3,4588	91	2,7677	151	2,2147	211	1,7722	271	1,4181	331	1,1347		
32	3,4459	92	2,7574	152	2,2065	212	1,7656	272	1,4128	332	1,1305		
33	3,4332	93	2,7472	153	2,1983	213	1,7591	273	1,4076	333	1,1263		
34	3,4204	94	2,7370	154	2,1901	214	1,7525	274	1,4024	334	1,1222		
35	3,4077	95	2,7269	155	2,182	215	1,7460	275	1,3972	335	1,1180		
36	3,3951	96	2,7167	156	2,1739	216	1,7396	276	1,3920	336	1,1139		
37	3,3825	97	2,7067	157	2,1659	217	1,7331	277	1,3868	337	1,1097		
38	3,3700	98	2,6966	158	2,1578	218	1,7267	278	1,3817	338	1,1056		
39	3,3575	99	2,6866	159	2,1498	219	1,7203	279	1,3766	339	1,1015		
40	3,3450	100	2,6767	160	2,1419	220	1,7139	280	1,3715	340	1,0974		
41	3,3326	101	2,6667	161	2,1339	221	1,7075	281	1,3664	341	1,0934		
42	3,3203	102	2,6569	162	2,126	222	1,7012	282	1,3613	342	1,0893		
43	3,3080	103	2,6470	163	2,1181	223	1,6949	283	1,3563	343	1,0853		
44	3,2957	104	2,6372	164	2,1103	224	1,6886	284	1,3512	344	1,0812		
45	3,2835	105	2,6274	165	2,1024	225	1,6824	285	1,3462	345	1,0772		
46	3,2713	106	2,6177	166	2,0946	226	1,6761	286	1,3412	346	1,0732		
47	3,2592	107	2,6080	167	2,0869	227	1,6699	287	1,3363	347	1,0693		
48	3,2471	108	2,5983	168	2,0791	228	1,6637	288	1,3313	348	1,0653		
49	3,2350	109	2,5887	169	2,0714	229	1,6575	289	1,3264	349	1,0613		
50	3,2230	110	2,5791	170	2,0637	230	1,6514	290	1,3214	350	1,0574		
51	3,2111	111	2,5695	171	2,0561	231	1,6453	291	1,3165	351	1,0535		
52	3,1992	112	2,5600	172	2,0485	232	1,6392	292	1,3117	352	1,0496		
53	3,1873	113	2,5505	173	2,0409	233	1,6331	293	1,3068	353	1,0457		
54	3,1755	114	2,5410	174	2,0333	234	1,6270	294	1,3020	354	1,0418		
55	3,1637	115	2,5316	175	2,0258	235	1,6210	295	1,2971	355	1,0380		
56	3,1520	116	2,5222	176	2,0183	236	1,6150	296	1,2923	356	1,0341		
57	3,1403	117	2,5129	177	2,0108	237	1,6090	297	1,2875	357	1,0303		
58	3,1287	118	2,5035	178	2,0033	238	1,6030	298	1,2827	358	1,0264		
59	3,1171	119	2,4943	179	1,9959	239	1,5971	299	1,2780	359	1,0226		
60	3,1055	120	2,4850	180	1,9885	240	1,5912	300	1,2733	360	1,0189		

10. Tariff for the use of an Exit to serve a New Costumer during the Trial Operation Period for 2022
(Article 16, Paragraph 3 of Tariffs Regulation).

NUCi, €/KWh GCV	2022
i = North Zone	0,0008368
i = South Zone	0,0008368

11. Percentage surcharge p % (Article 17, Paragraph of Tariffs Regulation)

It is defined equal to 20%.