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BESSEGHINI STEFANO
AUTORITÀ DI REGOLAZIONE PER ENERGIA RETI E AMBIENTE
Presidente
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“Glorenza (IT) – Nauders (AT)” Exemption application

Opinion of the Italian Regulatory Authority for Energy, Networks and Environment (ARERA)

October 2020

CONTENTS

PREFACE

On 16 March 2020, the company Resia Interconnector S.r.l. (with registered office in via Egidio Galbani 70, Rome – Italy, hereinafter: Resia or the **Applicant**) submitted to the Italian Ministry of Economic Development (reception date: 16 March 2020) and, for the purpose of coordination between the regulatory authorities concerned in the meaning of Art. 63(4) of Regulation (EU) 2019/943, to E-Control (reception date: 2. June 2020) the exemption application for “Glorenza (IT) – Nauders (AT)” interconnection project (hereinafter “**Passo Resia interconnector**”).

The request is submitted by the Applicant according to Article 63 of Regulation (EU) 2019/943.

The Applicant asked for the exemption from the provisions of:

- Article 19(2) and 19(3) of Regulation (EU) 2019/943 of the European Parliament and of the Council of 5 June 2019;
- Article 9 of Directive 2009/72/EC of the European Parliament and of the Council of 13 July 2009, if deemed necessary by the competent Authority(es) (to be replaced by Article 43 of Directive (EU) 2019/944 from 1 January 2021).

The exemption is requested with reference to half of the total interconnection capacity (which is expected to be equal to 300 MW in both directions) of the Passo Resia interconnection project and for a period of 10 years starting from the date of its commercial operation.

The exemption would therefore apply to the share of the congestion rents attributable to the Italian side only[1] as the Austrian portion of the interconnector will be owned and managed by the TSO (Austrian Power Grid AG).

The Italian Ministry of Economic Development requested Terna to finance 150 MW by private investors rather than by national transmission tariffs, in line with the legal framework in place for the “Piemonte (IT) – Savoia (FR)” interconnection project in 2016[2].

As a consequence, if the exemption is granted, the Italian share of the investment (corresponding to 150 MW, half of the whole project) will be financed by private investors.

[1] The congestion rents attributed to the Italian side will be determined according to the related CACM and FCA methodologies approved by the relevant NRAs.
[2] https://ec.europa.eu/energy/sites/ener/files/documents/2016_piemonte-savoia_decision_en.pdf

Accordingly, a specific contractual framework was set up by the Applicant (Resia) and the private investors (the Assignees) selected by Terna to finance the interconnector.

In particular, Resia – a company whose mandate is to fulfil all the necessary legal and administrative procedures to apply for the Exemption request – covers the same role as the company Piemonte-Savoia under the Exemption application granted on the French side in 2016.

Resia is currently owned by Terna and will be sold to the Assignees before the exemption enters into force.

A timely and successful finalization of the exemption request process is paramount for the private investors to finance the interconnector. Only in case the exemption is granted, the private investors will be able to finance the amount of 150 MW on the Italian side, whose costs would therefore not be included into the national transmission tariffs.

Considering that:

- the Italian legislation assigns to the Ministry of Economic Development the responsibility of granting exemptions under a non-binding opinion of the Italian Regulatory Authority for Energy, Networks and Environment (ARERA);
- the Ministry transmitted the Exemption Request to ARERA on 1 April 2020 (reception date: 2 April 2020);
- the Passo Resia interconnector lies across Italy and Austria;
- Article 63 of Regulation (EU) 2019/943 requires that the decision granting an exemption shall be taken by the regulatory authorities of the Member States concerned (Italy and Austria in the case at hand).

In accordance with Article 63(4) of Regulation(EU) 2019/943, the concerned NRAs must reach an agreement on the exemption nevertheless, considering that the Resia Exemption application concerns the portion of the project located on the Italian territory only and the congestion revenues attributable to the Italian side only, E-Control informed ARERA that it has no jurisdiction to assess the substantive criteria of the exemption request with regard to the portion of the project located on Italian territory pursuant to Art. 63(1) of Regulation (EU) 2019/943 and therefore will not adopt its own national decision. Therefore, the information presented by the Applicant on the basis of the provisions of Regulation (EU) 2019/943 and Directive 2009/72/EC was reviewed and analysed by ARERA while E-Control was kept informed during the process for the purpose of coordination between the regulatory authorities concerned pursuant to Art. 63(4) of Regulation (EU) 2019/943.

Article 63(7) of Regulation (EU) 2019/943 also requires the concerned NRAs to transmit a copy of any exemption request to the Agency for the Cooperation of Energy Regulators (ACER) and the European Commission (EC). ARERA sent a copy of the Exemption application to both ACER and the EC on 5 May 2020.

Therefore, the present document represents the Opinion of ARERA to the Ministry of Economic Development on the Resia Exemption application, based on the criteria laid down in Article 63(1) of Regulation (EU) 2019/943. The present document was also shared with E-Control for the purpose of reaching an agreement between the regulatory authorities concerned pursuant to Art. 63(4) subparagraph 5 of Regulation (EU) 2019/943, whereas E-Control does not object the conclusions of the present opinion.

The document is divided in three parts:

- Chapter 1 provides a description of the project, according to the Exemption application submitted by the company Resia and the information collected in the course of the assessment of this application until the date of the issuance of the present Opinion;
- Chepter 2 contains the assessment on the fulfillment of the criteria of Article 63(1) of Regulation (EU) 2019/943, supported by data and considerations;
- Chapter 3 contains the Opinion of ARERA on the Exemption application and the terms and conditions under which the exemption should be granted.

1 THE PROJECT, FACTS AND FIGURES

In the following paragraphs, an overview of the Passo Resia interconnector project is provided, based on the information received from the Applicant in its Exemption application, with a special focus on those aspects which are relevant for the present Opinion.

1.1 The Project

1.1.1 Main technical features

The project for which the Applicant submitted an exemption application is an alternating current (AC), 220 kV, underground interconnection with a total nominal capacity of 300 MW that will connect the existing electrical substation in Glorenza, province of Bolzano, and the planned substation in Nauders, Tyrol, crossing the border between Italy and Austria at Reschenpass / Passo Resia.

The project is included in both TERNA and APG National Development Plans and into the TYNDP 2018[3].

Passo Resia interconnector project will be jointly developed and managed by the TSOs in Italy (TERNA SpA[4]) and in Austria (Austrian Power Gris AG; hereinafter: APG).

In Austria, the interconnector will be owned by APG.

In Italy:

- the interconnector is currently owned by the company Resia within Terna Group;
- according to the contractual framework between Terna and the Assignees, the company Resia will be sold to the Assignees before the entry into commercial operation of the interconnector if the exemption is granted.

The main electrical characteristics of the Passo Resia Interconnector are summarized in the following table (Table 1):

Configuration	AC underground cable

[3] https://tyndp.entsoe.eu/tyndp2018/projects/projects/26

[4] Terna Rete Italia (TRI) is responsible within the Terna Group (the Italian Transmission System Operator), for the operation, maintenance and development of the national electricity grid.

Rated power	450 MVA
Nominal capacity	300 MW
Nominal voltage	220 kV
Maximum operating voltage	245 kV
Rated current	1133 A
Cable technology	Copper cable 1600 mm2, insulated XLPE
Length (KM/Cable)	26 km (from border to Glorenza) + 2 km (from border to Nauders)

Table 1 - Electrical characteristics of the project

The Passo Resia interconnector will be managed by the TSOs according to the existing regulatory framework. In particular, the allocation of cross border capacity will be based on Regulation (EU) 1222/2015 (CACM GL), Regulation (EU) 2016/1719 (FCA GL) and Regulation (EU) 2017/2195 (EB GL).

1.1.2 Capacity

The NTC of an AC interconnector is not an intrinsic property of the line, since it depends on the power system to which it is connected. To identify the NTC value(s) to properly assess an exemption, it is necessary to define the expected system scenario(s) that would exist once the new interconnector starts its commercial operations.

With reference to 2019, the value of NTC on the AT-IT border was set between 80 MW (export to Austria, summer, peak) to 315 MW (export to Italy, winter, peak).

To date, there exists two interconnections between Austria and Italy:

- 220 kV Soverzene (IT) – Lienz (AT)
- 132 kV Tarvisio (IT) – Arnoldstein (AT)

Moreover, other cross border interconnections are under development, even if at different stage of maturity as described by ENTSOE in the TYNDP and by the TSOs in their national development plans. The most advanced initiative is the 132 kV interconnection between Prati di Vizze (IT) and Steinach (AT), expected to be commissioned in 2020[5].

As determined by the TSOs (TERNA and APG) and specified in the technical and economic Report annexed to the Exemption application, the maximum

[5] https://tyndp.entsoe.eu/tyndp2018/projects/projects/336

increase of the net transfer capacity (NTC) is estimated up to 300 MW in both directions[6].

Historical data on capacity allocation show congestions usually occur when Italy imports, which is the most likely situation over time, while exports to Austria, less a frequent case, do not generally present congestions (i.e. the commercial flows are below the transmission capacity).

1.1.3 Timing

According to the Applicant, the construction of the Passo Resia Interconnector, includes various activities which are expected to be completed by the end of 2022 with the start of commercial operations within the first half of 2023.

The works planned for the project are:

- a new 380 kV/220 kV substation known as Nauders in Austria, which will be connected to the 380 kV Westtirol – Pradella (CH) tie-line close to the Italian border, including phase transformers (PST) to control the flow of power in the new interconnection;
- a new 220 kV underground cable power line between the Nauders substation and the Italian border through to the 220 kV Glorenza substation in Italy, with the relative work associated with adjusting existing systems.

According to the information provided by the Applicant, the works on the Italian side can be catalogued in the following three macro-areas:

- civil and underground works, which regards the creation of conduits to lay the cable;
- supply and installation of the AC cable;
- civil and electrical works on the existing substation in Glorenza.

1.2 The shareholders of the project

In order to clarify who are the shareholders of the Interconnector, it is necessary to describe the Italian legal framework under which the construction of the Passo Resia Interconnector has been promoted.

[6] https://tyndp.entsoe.eu/tyndp2018/projects/projects/26

To contribute to the creation of the single electricity market Article 32 of Law 99/09 includes provisions on the planning, construction and operation by TERNA of one or more upgrades to the international interconnection infrastructures in the form of "interconnectors" as originally referred to into Regulation (EC) 1228/2003 of the European Parliament and of the Council of 26 June 2003, in the presence of specific financing from third party investors.

Under this provision, TERNA notified to the Ministry of Economic Development and ARERA a list of possible infrastructures to be developed and arranged a tender procedure for the selection of entities which intended to provide support in the funding of those infrastructures up to 2.500 MW.

According to Article 32 of Law 99/09, the participation to tendering procedures is limited to end customers (also grouped together) which are:

- holders of consumption units each with an available withdrawal capacity of not less than 10 MW, characterized by a utilization factor -on average in the previous three years - of not less than 40% (excluding the fifteen days with the lowest electricity withdrawal on an annual basis);
- committed to make their withdrawals interruptible upon the direct control of Terna in case of critical network conditions.

In order to promote the participation of private investors in the tendering procedure, and consequently into the financing of the infrastructures needed to improve the integration of the Italian electricity market, paragraph 3 of the aforementioned Article 32 of Law 99/09 foresees that the commitment of the Assignees to provide support in the financing of the interconnectors is subject to the granting of a specific Exemption under the Italian Ministerial Decree of 21 October 2005 and the relevant EU Regulation.

Finally, Law 99/09 stipulates that the Assignees shall enter into a mandate contract with Terna for the planning, construction and operation of the selected interconnector. This contract goes into effect once the Exemption is granted.

Therefore, under the legal framework described above, TERNA identified a share of the Passo Resia Interconnector capacity as a possible project to be financed according to the provisions of Article 32 of Law 99/09.

The shareholders of the new interconnector (the Assignees) were selected during a tender procedure launched by Terna in 2009/2010 for an overall interconnection capacity between Italy and Austria equal to 500 MW, 150 of which refer to the Passo Resia Interconnector.

The selected Assignees are 72 industrial customers[7] operating in the field of production and processing of steel, chemicals and paper. The Applicant states that most of them are not active in any branch of the electricity supply chain, while those few that perform some activity within the industry, mainly for self-consumption or optimization of supplies, have absolute negligible market shares both in the Italian and Austrian electricity markets as illustrated in the Technical and Economic Report attached to the Exemption application.

In December 2013, a Memorandum of Understanding was signed by Terna and the trade associations of end customers (Federacciai, Assocarta, Federchimica, Aitec/Cemento and Assovetro) which defined the major mutual commitments. Under this agreement, the Assignees were given the right to form an ad hoc company in order to finance the project. To this end and with a view to making the transfer of the interconnector projects to the Assignees more efficient, on 16 July 2018 TERNA established the company Resia (sole shareholder company, currently subject to management and control by Terna), in order to present, upon a mandate by the Assignees, an exemption request for 150 MW of cross border capacity with reference to the Passo Resia interconnector and ii) develop the Passo Resia interconnector in the context of the provisions of Italian Law 99/09[8].

Therefore, the company Resia acts in its own name and on behalf of the Assignees, given that the Exemption decision will only become effective on the condition that, prior to the entry into service of the Passo Resia interconnector, the entire share capital of Resia will be passed to the Assignees and TERNA will no longer have any direct or indirect stake in the company receiving the Exemption.

The following Error: Reference source not found shows the major (future) shareholders of the company Resia and their (future) share of the Passo Resia interconnector capacity which will be allocated to each Assignee.

Given the number of the Assignees (72) and their commitment into financing the Passo Resia interconnector, it can be concluded that all of them have a negligible share of available transmission capacity rights, as reported in Table 2 with reference to the largest ones.

[7] The complete list of the Assignees, and their shares into the project, is reported into the Exemption request

[8] The same approach was implemented for the development with the company Piemenote-Savoia for a similar project between Italy and France under the legal framework of Law 99/09.

Major Assignees	% (of 150 MW)
Acciaieria Arvedi SpA	8.9%
ARCELORMITTAL ITALIA SPA	7.5%
Consorzio Toscana Energia SpA	7.1%
BURGO GROUP SPA	5.6%
ALFA ACCIAI SPA	4.8%
Air Liquide Italia Produzione Srl	4.4%
ACCIAI SPECIALI TERNI SPA	4.1%
ACCIAIERIE VENETE SPA	3.6%

Table 2 major Assignees (once the exemption is granted)

1.3 The financial model

The Applicant provided in the Exemption application a description of the business model and identified several risk factors associated to the Interconnector and related to the conditions of the electricity market and to the technical characteristics of the infrastructure itself.

In the following paragraphs the key variables presented by the applicant within its business plan will be analysed. As a general note, the Applicant specifies that given the risks associated with the investment, <u>if the Exemption were not granted as requested, Resia would be forced to renounce financing the infrastructure</u>.

1.3.1 Hypotheses and results according to the Applicant

In terms of their impact on the project's performances, ARERA believes that the key variables concerning the Passo Resia interconnector are the following:

1) **PRICE DIFFERENTIALS:** Assuming the Passo Resia interconnector will be in operation from 2023, the Applicant adopts a price differential of 11.7 to 14.1 €/MWh and 12.2 to 16.5 €/MWh according to two different scenarios over the period from 2023 to 2032.

2) **NTC:** According to the Applicant, the maximum increase of the net transfer capacity (NTC) is estimated up to 300 MW in both directions. The amount is determined by the TSOs (TERNA and APG) and specified in the technical and economic Report annexed to the Exemption application.

3) **INVESTMENT COSTS (ITALIAN SHARE):** In its Exemption request, the Applicant estimated the costs and developed a financial analysis. The construction of the Passo Resia interconnector entails an investment cost for the company Resia estimated at Euro 85 million (investments for the Austrian side will be financed by APG and is out of scope for the present Opinion). This investment will be partly funded through recourse to borrowing (50%) and partly through own equity capital (50%). The selected technical solution (underground cable) and the chosen route have the advantage of reducing the environmental impact (the path of the line is near areas of environmental, natural, landscape and archaeological importance and residential areas in the Alpine context), but implies that the costs of the investment are particularly high. Investments costs can substantially affect the expected net return of an investment. Moreover, the Applicant quantified the operating costs in Euro 2.3 million/year.

   The following Table 3 provides an overview of the cost components of the Passo Resia interconnector, as well as their relative weight with respect to the total capital expenditures.

CAPEX	**€MLN**	**%OVER TOTAL CAPEX**
Cable supply and installation	76.9	90.5%
Substation works	5.5	6.4%
Civil works	2.7	3.1%
TOTAL	85,1	100%

Table 3 - Share of investment costs with respect to total capital expenditures

1.3.2 Hypotheses and results according to ARERA

1) **PRICE DIFFERENTIALS**: Table 4 shows the historical values of the day ahead price differentials of the bidding zones Italy North and Austria as recorded in the past years.

Year	Price spread [€/MWh][9]
2012	31.5

[9] ACER Market Monitoring Reports 2013 - 2020

2013	23.8
2014	17.6
2015	21.1
2016	13.7
2017	20.2
2018	14.4
2019	11.2
2020	4,38[10]

Table 4 -Price differential North Italy-Austria [€/MWh]

ARERA believes that the values of the price differentials and of the volatility of the price spreads between Italy and Austria for the coming years are very difficult to evaluate in advance because significant variables could have a positive or negative impact on them.

For example, there are risks linked to the long-time horizon considered in the business plan, to the evolution of the generation mix and demand patterns, to the implementation of rules springing from the European Regulations, to the role of Switzerland in the IEM, to the role of renewables, to the economic trends (including the consequences of the COVID-19 pandemic), etc. Furthermore, it should be noted that the congestion revenues originating from the capacity allocation procedures (which represent the one and only income for the Applicant) could be significantly lower than the actual price differential, as they are affected by the hedging strategies adopted by the auction participants and by the reimbursements that the TSO shall give to the capacity holders for the possible restrictions in their nomination rights due to curtailments (firmness).

Therefore, taking into account the above historical values and the risks associated to the evaluation of the future values, ARERA thinks that the price differentials adopted by the Applicant (11.7 to 14.1 €/MWh and 12.2 to 16.5 €/MWh depending on the scenario) could be considered reasonable even if characterized by substantial uncertainties.

2) NTC

The maximum increase of the net transfer capacity (NTC) is estimated by the Applicant up to 300 MW in both directions.

[10] January – September 2020, source: ARERA's own evaluations

Neither the hypothesis nor the methodology implemented for the calculation are described within the Exemption application therefore the maximum value is taken as given.

Moreover, it is worth noting that the historical NTC values can vary significantly through the year. For example, in 2019 and 2020, NTC was 80 MW in export to Austria at peak hours during the summer and 315 MW in export to Italy at peak hours during the winter, while in between those extreme values for other periods of the year.

Future values of the NTC are also linked to the implementation of EU Regulations whose impact are yet to be checked on the field. Among others, we can list the recently approved capacity calculation methodologies from Regulation (EU) 2015/1222 (CACM) and Regulation (EU) 2016/1719 (FCA), the 70% rule according to Regulation (EU) 2019/943, the shift from the current NTC to the flow-based approach and the bidding zone review process currently under development.

3) **INVESTMENT COSTS**- The major share (above 90%) of the investment costs (Italian side) for the Passo Resia interconnector is represented by the underground cable supply and installation.

   The costs presented by the Applicant were compared to the information presented by the *Pan-European cost-efficiency benchmark for electricity TSOs* issued in 2019 by CEER[11]. In particular, the CEER report developed a linear model to estimate the base cost per km of underground cables (chapter 4.4) –– which should be then corrected by a terrain cost multiplier, identified between 1.3 and 2 for mountain areas with significant slopes (according to table in chapter 5.1).

   Therefore, applying the methodology proposed by the CEER report, it can be concluded that the share and the amount of costs presented in the business plan are in line with the expected costs of projects with similar characteristics in terms of size, technology and route.

[11] https://www.ceer.eu/1766

2 EXEMPTION APPLICATION ANALYSIS

The Applicant requested, on the Italian side only, an Exemption from the provisions of:

- Article 19(2) and 19(3) of Regulation (EU) 2019/943 of the European Parliament and of the Council of 5 June 2019;
- Article 9 of Directive 2009/72/EC of the European Parliament and of the Council of 13 July 2009, if deemed necessary by the competent Authority(es) (to be replaced by Article 43 of Directive (EU) 2019/944 from 1 January 2021).

The Exemption, of financial nature, is requested with reference to 150 MW of the Italian part of the Passo Resia interconnection project (with an expected maximum NTC of 300 MW in both directions) and for a period of 10 years starting from the date of its commercial operation.

The current Exemption application would therefore apply to the share of the congestion rents attributable to the Italian side[12] only as the Austrian portion of the interconnector will be owned by the TSO (Austrian Power Grid AG).

Considering that the Exemption application concerns the portion of the project located on the Italian territory only, E-Control has informed ARERA that it has no jurisdiction to assess the substantive criteria of the exemption request with regard to the portion of the project located on Italian territory pursuant to Art. 63(1) of Regulation (EU) 2019/943 and hence, will not adopt its own national decision. . Therefore, the information presented by the Applicant on the basis of the provisions of Regulation (EU) 2019/943 and Directive 2009/72/EC was reviewed and analysed by ARERA and shared for coordination purposes in line with Art. 63(4) of Regulation (EU) 2019/943 with E-Control, whereas E-Control does not object the results of the review and analysis conducted by ARERA.

In the following paragraphs, an analysis of the Project is provided, based on the information enclosed to the Exemption application and with a special focus on the aspects which are relevant for the Exemption opinion. In particular, this part is aimed at analysing if the criteria of Article 63 of Regulation (EU) 2019/943 are satisfied.

[12] The congestion rents attributed to the Italian side will be determined according to the related CACM and FCA methodologies approved by the relevant NRAs.

2.1 Criteria assessment

2.1.1 Eligibility of the requests

Article 63(1) of Regulation (EU) 2019/943 states: "*New direct current interconnectors may, upon request, be exempted, for a limited period, from Article 19(2) and (3) of this Regulation and from Articles 6 and 43, Article 59(7) and Article 60(1) of Directive (EU)* 2019 under the following specific conditions:

- *(a) The investment must enhance competition in electricity supply;*
- *(b) the level of risk attached to the investment is such that the investment would not take place unless an exemption is granted;*
- *(c) the interconnector must be owned by a natural or legal person which is separate, at least in terms of its legal form, from the system operators in whose systems that interconnector will be built;*
- *(d) charges are levied on users of that interconnector;*
- *(e) since the partial market opening referred to in Article 19 of Directive 96/92/EC of the European Parliament and of the Council, no part of the capital or operating costs of the interconnector has been recovered from any component of charges made for the use of transmission or distribution systems linked by the interconnector; and*
- *(f) an exemption would not be to the detriment of competition or the effective functioning of the internal market for electricity, or the efficient functioning of the regulated system to which the interconnector is linked*".

As described in the previous chapter, the Applicant submitted an Exemption request for a new alternating current (AC), 220 kV, underground interconnection. ARERA considers that, according to Article 63, paragraph 2[13], the request is eligible for an Exemption under the conditions listed above. It is important to remind that the compliance with the conditions shall be cumulative.

[13] *2. Paragraph 1 shall also apply, in exceptional cases, to alternating current interconnectors provided that the costs and risks of the investment in question are particularly high when compared with the costs and risks normally incurred when connecting two neighbouring national transmission systems by an alternating current interconnector.*

2.1.2 Competition

(a) *The investment must enhance competition in electricity supply;*

According to data published by the TSOs[14], the NTC for 2020 on the bidding zone border Austria – Italy North is reported in Table 5.

MW			Winter	Summer
AT → IT	Monday to Saturday	Peak	315	270
		Off-peak	295	255
	Sunday and bank holidays	Peak	295	255
		Off-peak	295	255
AT → IT	Monday to Saturday	Peak	100	80
		Off-peak	145	100
	Sunday and bank holidays	Peak	145	100
		Off-peak	145	100

Table 5 - 2020 NTC (MW) Austria - Italy North (source: TERNA)

As a matter of facts, the electrical border between Austria and Italy is one of the most congested (AT→IT) of the whole Europe with significant price differentials[15] as reported in Error: Reference source not found.

Therefore, a new interconnection is likely to increase competition levels by increasing cross-border capacity thus widening the potential supply sources and trading opportunities.

According to the TYNDP 2018[16],the project will:

- improve the integration of RES generation into the Continental European transmission grid;
- contribute to reduce system adequacy deficiencies by increasing transmission capacity
- help Italy reach the 15% target by 2030
- improve system flexibility, also through the exploitation of the hydro-pumped storage plants in the Alps;
- contribute to lowering the price differentials between Austria and Italy.

[14] https://www.terna.it/en/electric-system/electricity-market/capacity-interconnection-abroad

[15] ACER/CEER Annual Report on the Results of Monitoring the Internal Electricity and natural Gas Markets in 2018, Electricity Wholesale Markets Volume November 2019

[16] https://tyndp.entsoe.eu/tyndp2018/projects/projects/21

According the Applicant own's evaluations, as presented in the technical and economic report annexed to the application, the project will generate *benefits for both interconnected markets, the Italian market driven by an increase in surplus for consumers due to lower prices on the wholesale market and the Austrian market thanks to the increase in producer surplus due to the increase in electricity prices thanks to greater exports going to Italy*. Benefits at EU level are quantified by the Applicant in the range 29 to 31 million/year according to the scenario considered.

In particular, the creation of this new Interconnector enhances competition for the following reasons:

- the new capacity will be available to all market participants, increasing the liquidity of the wholesale (forward, day ahead, intraday and balancing) electricity markets on both sides of the border;
- the transmission capacity will be allocated according to the rules in place for cross border capacity allocation set by the EU Regulations;
- the new capacity will also be available to TSOs and balancing service providers, increasing liquidity, efficiency and integration on balancing markets. As a side-benefit, the Interconnector will improve operational reliability of both systems as well.

Furthermore, the enhancement of competition is also due to the fact that the Applicant states that none of the shareholders[17] of the Interconnector (mainly industrial productive companies) has had so far a significant presence in the electricity markets of both Italy and Austria.

With reference to the impact that the new infrastructure will have on the Italian market, ARERA assumes that the most impacted zone will be Italy North bidding zone (the Italian market solves structural congestions by identifying several bidding zones, the North one being the relevant one for this Exemption procedure).

ARERA believes that the realization of the Passo Resia interconnector would increase the diversification of electricity sources that is one of the most effective strategies for ensuring both affordable prices in the long run and security of supply under emergency conditions.

As better identified in chapter 3, the allocation of the Passo Resia interconnection cross zonal transmission capacity will be managed according

[17] For a detailed description of shareholders activities, please refer to the Technical and Economic Report annexed to the Exemption application.

to the existing regulatory framework based on Regulation (EU) 1222/2015 (CACM GL), Regulation (EU) 2016/1719 (FCA GL) and Regulation (EU) 2017/2195 (EB GL). Therefore, the interconnection capacity will be available to all market participants, increasing the liquidity of the wholesale (forward, day ahead, intraday, balancing) electricity markets on both sides of the border and in central Europe more in general; as a consequence, price convergence will improve.

Condition *(a)* is thus considered fulfilled.

2.1.3 Level of risk

> *(b)* *the level of risk attached to the investment is such that the investment would not take place unless an exemption is granted;*

The assessment of condition b) is linked to the exemption from the use of revenues.

The Applicant requests an exemption from Article 19(2) and 19(3) of Regulation (EU) 2019/943 in order to collect, from the TSO, the Italian part of the revenues resulting from the interconnector capacity allocation. The Applicant considers that this will allow it to recover construction, operation and maintenance costs, and provide a return that it considers adequate.

The Exemption is requested with reference to 150 MW of the Italian part of the Passo Resia interconnection project (with an expected maximum NTC of 300 MW) and for a period of 10 years starting from the date of its commercial operation.

Only in case the exemption is granted, the private investors (the Assignees) will be able to finance the Passo Resia interconnector on the Italian side, whose costs will therefore not be included into the national transmission tariff. In fact, the congestion revenues represent the sole source of revenue[18] for the Assignees against the high investment and operating costs relative to the 150 MW of the Italian side of the line.

[18] According to the Exemption application, *Terna has preventively expressed its willingness to acquire the Interconnector - at the end of any exemption that may be granted - for an amount equal to the historic cost of investments net of relative amortisation, calculated on the basis of the useful life for accounting purposes adopted by Terna S.p.A. for the relative asset types ("Book Value"), with the consequent assignment in relation to the same of the tariff-based remuneration established by ARERA (and, in any case, based on the criteria to be defined upon completion of the exemption procedure)*

The Applicant underlines that *the expected economic return of the project is limited and subject to a series of specific risks which could prejudice the profitability and sustainability of the investment, including market risk, regulatory risk, operating risk and investment risk* mainly originating from the following aspects:

- revenues: from an economic perspective, the risk concerns mainly the volume of revenues, which will depend only on the future value of cross border capacity[19] which in turn will be linked to the actual price differentials of the two countries/zones involved;
- regulation: from the regulatory perspective, the framework has been facing significant changes whose implications are yet to be understood on the field. Among others, we can list the recently approved capacity calculation methodologies from Regulation (EU) 2015/1222 (CACM) and Regulation (EU) 2016/1719 (FCA), the possible shift from the current NTC to the flow-based approach and the bidding zone review process;
- there are also uncertainties associated with the amount of the investment until the end of the construction works. The route for the line is located not only in an Alpine area but also close to areas of environmental, natural, landscape and archaeological value, as well as near residential areas which might require placement variants during the installation. These aspects increase the level of uncertainty with regards to the schedules and costs for completing the work. It should also be considered that, underground solutions, imply higher costs with respect to most overhead power lines.
- O&M costs: changes in the market conditions may affect the amounts of Operation & Maintenance contracts, insurance, personnel costs.

The Applicant declared that <u>if the Exemption is not granted, the Interconnector would not be financed by the Assignees and the Applicant would be forced to renounce financing the project</u>. This possibility will negatively affect the realization of the Passo Resia interconnector.

ARERA thinks that granting the Exemption to the Applicant could not only mitigate the above listed risks for the private investors, but it could also

[19] Quantification of NTC for an AC interconnector is in fact only partly related to the nominal capacity of the line as it mainly depends on the power systems to which it is connected and by the Coordinated Capacity Methodology in place for the Capacity Calculation Region Italy North which includes the borders between Italy, Austria, France and Slovenia plus Switzerland. Therefore, for the Applicant, the expected NTC represents a major technical risk

prevent the regulated system (and consequently final customers) to bear all the costs of the project which is a project that incurs high costs given the specific limitations imposed by the environment of the relevant area.

Given the costs of the project on the Italian side, the analysis regarding price differentials and the financial analysis by the Applicant, ARERA considers that granting the exemption from Article 19(2) and 19(3) of Regulation 2019/943 would not lead to a disproportionate return.

Therefore, granting the exemption for a reasonable number of years – and at the same time safeguarding the third-party access regime foreseen by European regulations – seems to be the most efficient way to implement the project.

Condition *(b)* is thus considered fulfilled.

2.1.4 Separation from existing System Operators

> *(c)* *the interconnector must be owned by a natural or legal person which is separate at least in terms of its legal form from the system operators in whose systems that interconnector will be built;*

As explained in Chapter 1, paragraph 1.2, the Assignees will be the only shareholders of the company Resia (which owns the interconnector), under the condition that the Exemption is granted.

Information provided by the Applicant proves that the above Assignees are independent (as regard to both their legal form and ownership structure) from the Italian TSO Terna.

Condition *(c)* is thus considered fulfilled.

2.1.5 Charges

> *(d)* *charges must be levied on users of that interconnector;*

As already described, the Passo Resia interconnector capacity will be allocated according to the existing regulatory framework based on Regulation (EU) 1222/2015 (CACM GL), Regulation (EU) 2016/1719 (FCA GL) and Regulation (EU) 2017/2195 (EB GL), i.e. according to the ordinary rules applicable at European level on cross-border capacity allocation. Therefore, users will pay only for the value of the capacity determined in accordance with the EU framework and the specific market timeframe (long term, day ahead, intraday and balancing).

The Applicant is expected to collect, from the TSO, the congestion revenues of the allocation process for the exemption period. As specified in 3.3, the settlement will be regulated by a Commercial contract between the Applicant and the TSOs to be approved by ARERA.

Condition *(d)* is thus considered fulfilled.

(e) *since the partial market opening referred to in Article 19 of Directive 96/92/EC of the European Parliament and of the Council of 19 December 1996 concerning common rules for the internal market in electricity, no part of the capital or operating costs of the interconnector has been recovered from any component of charges made for the use of transmission or distribution systems linked by the interconnector;*

The applicant declared that:

- costs paid by the company Resia prior to transfer to the Assignees will be repaid to Terna by the Assignees;
- no part of the costs sustained by the Assignees through the company Resia will be recovered by national transmission or distribution tariffs;
- the Assignees' revenues will be linked solely to congestion revenues originating from the line.

ARERA will assure the compliance with the above commitments and therefore Condition (*e*) may be considered fulfilled.

2.1.6 The exemption must not be detrimental to competition or the effective functioning of the internal market

(f) *the exemption must not be to the detriment of competition or the effective functioning of the internal market in electricity, or the efficient functioning of the regulated system to which the interconnector is linked.*

The realization of the Interconnector does not seem detrimental to the proper market functioning mainly because (as explained above – point *a*) the new capacity will be available to all market participants as from the beginning of operation according to European regulations (in particular FCA, CACM and EB guidelines).

Indeed, as underlined above, the Exemption application concerns only Article 19(2) and 19(3) of regulation 2019/943 and, where deemed necessary, Article 9 of Directive 2009/72/EC. Therefore, granting the exemption – of financial nature – will not hinder the overall optimization of the energy network and will not affect the availability of the new capacity. Furthermore, the great involvement of both TSOs in the project assures the full compatibility of the project with the two interconnected systems.

Finally, the Passo Resia interconnector will be operated under the direct responsibility of the TSOs, therefore the Assignees (which are the ultimate beneficiaries of the Exemption) will not have any role in the management and allocation of the interconnection capacity.

As a consequence, ARERA considers that there will not be any material risk of access by the Assignees to any commercially sensitive information on capacity allocation and capacity usage by market players. In any case, ARERA will verify that the Commercial and Technical Operation contracts, introduced in paragraph 3.2.3, contain adequate measures ensuring that the above risk of access to commercially sensitive information is avoided.

Condition *(f)* is thus considered fulfilled.

2.1.7 Unbundling

The Applicant declared that the Passo Resia interconnector will be owned by the Assignees, while the TSOs (APG and TERNA) will be responsible for its management and operation, fully independently from the Applicant.

In any case, ARERA considers that, in order to prevent any potential risk of undue influence by the Applicant over the interconnection's operation, the Technical Operation contract introduced in paragraph 3.3.2, shall contain adequate measure for the TSOs to ensure confidentiality of information and to avoid disclosure of any technical/commercially sensitive information related to the operation of the interconnection to the Applicant.

Conditions in Article 9(1)(a) and (b) of the Directive 2009/72/EC may be thus considered fulfilled.

3 OPINION OF ARERA

On 16 March 2020, the Applicant submitted to the competent authorities the Exemption application for the Passo Resia interconnection project currently under development from Glorenza (IT) to Nauders (AT) on the bidding zone border between Austria and Italy North.

The request is submitted by the Applicant according to Article 63 of Regulation (EU) 2019/943.

The Applicant asked for the exemption from the provisions of:

- Article 19(2) and 19(3) of Regulation (EU) 2019/943 of the European Parliament and of the Council of 5 June 2019;
- Article 9 of Directive 2009/72/EC of the European Parliament and of the Council of 13 July 2009, if deemed necessary by the competent Authority(es) 2009 (to be replaced by Article 43 of Directive (EU) 2019/944 from 1 January 2021).

The exemption is requested with reference to 150 MW of the Italian part of the Passo Resia interconnector – with a maximum expected total NTC of 300 MW – and for a period of 10 years starting from the date of its commercial operation.

Having regard to the assessment of the Exemption request submitted by the Applicant as presented in the previous parts of this document, ARERA's opinion is detailed in the following paragraphs. In particular, paragraph 3.3 presents the conditions under which the Exemption might be granted.

3.1 As regards the Austrian part of the Interconnector

The Applicant informed E-Control with reference to the submission of an Exemption application to the Italian Ministry of Economic Development and concerning only the Italian part of the Passo Resia interconnector, therefore not asking for an exemption with regard to the portion of the project located on Austrian territory. As a matter of consequence, E-Control informed ARERA that it has no jurisdiction to assess the substantive criteria of the exemption request with regard to the portion of the project located on Italian territory pursuant to Art. 63(1) of Regulation (EU) 2019/943 and hence, will not adopt its own national decision. Therefore, the information presented by the Applicant on the basis of the provisions of Regulation (EU) 2019/943 and Directive 2009/72/EC was reviewed and analysed by ARERA and shared for coordination purposes in line with Art. 63(4) of Regulation (EU) 2019/943 with E-Control, whereas E-Control does not object the results of the review and analysis conducted by ARERA, thereby establishing agreement of the regulatory authorities concerned in the meaning of Art. 63(4) subparagraph 5 Regulation (EU) 2019/943.

3.2 As regards the Italian part of the Interconnector

3.2.1 Exemption request from the provisions of Article 19(2) and 19(3) of Regulation 943/2019

In order to enable the Applicant to realize the proposed investment by offsetting the level of risk associated to the project, ARERA is of the opinion that an Exemption from the provisions of Article 19(2) and (3) of Regulation (EU) 2019/943 should be granted to the Applicant s for a capacity of 150 MW and for a period of 10 years, as better identified in chapter 3.3, starting from the beginning of the commercial operations of the interconnector under the conditions reported in paragraph Error: Reference source not found.

3.2.2 Exemption request from the provisions of Article 9 (unbundling) of the Directive 2009/72/EC

Article 9 of the Directive 2009/72/EC determines the requirements regarding TSO unbundling. The Directive allows derogations from the application of this Article only for transmission systems which belonged to a vertically integrated undertaking on 3 September 2009. Thus, any new interconnector has to apply the rules on ownership unbundling unless an exemption from Article 9 of the Electricity Directive is granted in compliance with the Article 17 of the Regulation 714/2009 Article 63 of regulation 2019/943).

According to Article 9(1)(a) of the Directive 2009/72/EC "*each undertaking which owns a transmission system acts as a transmission system operator*". This means that undertakings owning transmission systems shall directly carry out all the functions and obligations of transmission system operators.

The Applicant declared that the Assignees will be the owners of the Italian part of the Passo Resia interconnector, while Terna, and APG for the Austrian part, will be responsible for its management and operation. As a consequence, the company Resia will not act as a transmission system operator and therefore it has to be granted an exemption from the Article 9(1)(a) allowing it to own the Interconnector while not acting as a TSO.

Considering Article 9(1)(b), the aim is to avoid any possibility for the owners of an interconnector to influence the decisions of the development and management of the interconnector in favor of the interests they may have on the electricity supply or production. In the present case, the applicant declared that the Assignees will have no decision-making rights with respect to the full scope of the Interconnector's operation, development and maintenance.

Moreover, as already underlined in paragraph 1.2 and as declared by the Applicant in its Exemption request, the selected Assignees are industrial customers which do not hold any direct or indirect control over generation and/or supply of electricity activities in any of the two countries concerned or, in any case, have a negligible market presence in any relevant energy market of both countries.

It could be assumed from the foregoing that even if, the Assignees were in a position to influence the scope of commercial operations carried out by the TSOs, *quod non*, the formers would have no ability (for the reason explained above) and no incentives to foreclose competitors in the energy markets due to their insignificant interests in any of the Austrian and Italian electricity market. As a consequence, any such risk can be ruled out under the current conditions.

Notwithstanding the above, in order to prevent any potential risk of undue influence by the Assignees over the Interconnector's operation, the Technical Operation contract mentioned in paragraph 3.3.2 shall contain adequate measures ensuring compliance with Article 16 of Directive 2009/72/EC by TERNA. In addition, the aforementioned contract shall contain a clause that forbids the disclosure of any technical/commercially sensitive information related to the operation of the Interconnector to the Assignees, unless this is necessary for carrying out a specific task assigned to the former (e.g. financing extraordinary maintenance of the infrastructure, etc.).

During the exemption period, ARERA may take all the necessary measures to ensure that:

- the exemption from Article 9 is not detrimental to competition or the effective functioning of the internal electricity market, or the efficient functioning of the regulated system to which the interconnector is connected;
- the operator of the interconnector complies with the tasks defined under Article 12 of Directive 2009/72/EC.

The Applicant shall comply with the measures decided by ARERA.

In light of the foregoing, the exemption from the provisions of Article 9 of the Directive is considered to be necessary and therefore is to be granted.

3.3 Conditions associated to the exemption from the provisions of Article 9 (unbundling) of the Directive 2009/72/EC and Article 19(2) and 19(3) of Regulation 943/2019

The exemption from Article 9 (unbundling) of the Directive 2009/72/EC and Article 19(2) and 19(3) of Regulation (EU) 2019/943 should be granted for a period of 10 years and a capacity of 150 MW, starting from the beginning of the commercial operations of the new Interconnector, under the following conditions.

3.3.1 Exemption: capacity, duration and expiry

i. the exemption shall expire when, according to Article 63(8) of Regulation (EU) 2019/943, the European Commission's approval of an exemption decision will expire, that is:

   a. two years after the date the EC adopted its decision in the event that construction of the Interconnector has not yet started by that date;

   b. five years after the date the EC adopted its decision in the event that the Interconnector has not become operational by that date.

   Nevertheless, the exemption shall continue to be in force where the European Commission decides, pursuant to Article 63(8), that any delay is due to major obstacles beyond the control of the Applicant.

3.3.2 Operational arrangements

ii. In Italy the new Interconnector shall be operated under the responsibility of the TSO. To this purpose, a specific **Technical Operation contract** shall be entered between the Applicant and the TSO to enable the latter to effectively operate and maintain the new Interconnector under the same conditions as if it were the owner. The aforementioned Technical Operation contract will be drafted in accordance with the provisions of Article 36(9) of Legislative Decree n. 93 of June 1st, 2011 as applied by the Italian Authority. A copy of the Technical Operation Contract shall be sent to the ARERA for its approval.

3.3.3 Commercial arrangements

iii. The NTC of the new interconnection will be added to the existing NTC on the bidding zone border between Austria and Italy North and allocated by the TSOs through the same joint allocation procedures (for long term, daily, intraday and balancing timeframes) based on the existing regulatory framework (i.e. FCA GL, CACM GL and EB GL).

iv. The Applicant is entitled to receive by the concerned TSO, with reference to the exempted transmission capacity up to the end of the exemption period, the revenues resulting from the allocation procedures of the NTC of the interconnection (i.e. a corresponding share of the revenues originating from the allocation of the NTC of the interconnection on the bidding zone border between Austria and Italy North).

v. The commercial arrangements governing the transfer of the revenues of the congestion rents attributable to the Italian side by the Italian TSO to the Applicant shall be defined in a **Commercial contract** to be signed by the Applicant and the TSO. A copy of the Commercial Contract shall be sent to the Italian Authority for its approval.

vi. Prior to the entry into service of the Passo Resia interconnector, the entire share capital of the company Resia shall be transferred to the Assignees and since then Terna shall not have any direct or indirect stake in the company. Any subsequent change in the composition of Resia's share capital (including any change in share of the original Assignees) shall be promptly communicated to the Regulators for their evaluation.

3.3.4 Sharehoders, ownership and unbundling

vii. ix. Any change in the composition of the Assignees' share capital shall be promptly communicated to ARERA for its own evaluations. ARERA must then assess whether the conditions under which the exemption was granted are still met.

viii. If, directly or indirectly, an undertaking acquires joint or sole control over or merges with Resia, Resia must notify this change to each of the relevant national authorities concerned which must then assess (if deemed necessary in cooperation with a national competition authority) whether the conditions under which the exemption was granted are still met. The provision will be applied in accordance with Article 3 of Council Regulation (EC) No 139/2004 of 20 January 2004 on the control of concentrations between undertakings (the EC Merger Regulation) and the Commission Consolidated Jurisdictional Notice under Council Regulation (EC) No 139/2004 on the control of concentrations between undertakings (2008/C 95/01).

ix. pursuant to Article 3 of the ministerial decree of 21st October 2005, the Applicant shall provide a statement on their commitment to ask the Ministry for the Economic Development to include the interconnection in the perimeter of the National transmission system.

x. In accordance with Article 36(10) of the Legislative Decree n. 93 of June 1st, 2011, which calls on the Italian Authority to establish appropriate measures aimed at favoring the unification of the national grid, following the expiry date of the Exemption the ownership of the new Interconnector built on the Italian soil will be transferred to Terna S.p.A. The value of the asset shall not exceed the residual book value with revaluation and be determined on the basis of efficient costs. TERNA's regulatory asset base (RAB) will be amended accordingly.

3.4 Violation of the provisions of the present decision

Any infringement by the Applicant of the conditions set in the present exemption opinion may result in a penalty imposed on the Applicant to be determined in accordance to national law and procedures.

Serious violation by the Applicant of the conditions set in the present Opinion may result in withdrawal by the relevant body in the Member State (the Ministry of Economic Development in Italy) of the exemptions provided by this Opinion.