

## **Notice to Member States on the application by Portugal for a derogation from certain provisions of Directive (EU) 2019/944 of the European Parliament and of the Council of 5 June 2019 on common rules for the internal market for electricity and amending Directive 2012/27/EU**

### **1. Background**

On 15 November 2019<sup>1</sup>, the Portuguese Deputy Minister and Secretary of State for Energy (Ministry of Environment and Climate Action) submitted to the Commission an application for a derogation pursuant to Article 66 of Directive (EU) 2019/944 of the European Parliament and of the Council of 5 June 2019 on common rules for the internal market for electricity and amending Directive 2012/27/EU (the “Electricity Directive”).<sup>2</sup> Portugal wishes to derogate from the following provisions of the Directive:

- Article 4
- Article 5
- Article 6
- Article 35 and
- Article 36.

Article 66 provides that Member States which can demonstrate that there are substantial problems for the operation of their small connected systems and small isolated systems may apply to the Commission for derogations from the relevant provisions of Articles 7 and 8 and Chapters IV, V and VI. Small isolated systems may also apply for a derogation from Articles 4, 5 and 6 of the Directive. Article 66 also provides that the Commission shall inform the Member States of such applications before taking a decision, taking into account respect for confidentiality.

The application concerns a request for derogation from Articles 4 to 6, Article 35 and Article 36 of the Electricity Directive for the Berlenga island,<sup>3</sup> a small non-interconnected island situated in the archipelago of Berlenga, which falls under the definition of small isolated systems of the Electricity Directive.<sup>4</sup> Article 4 requires Member-States to ensure that all customers are free to purchase electricity from the supplier of their choice. Article 5 establishes that suppliers must be free to determine the price at which they supply electricity to customers, while considering the protection of vulnerable consumers. Article 6 requires Member States to ensure the implementation of a system of third-party access to the transmission and distribution based on published tariffs, applicable to all customers and applied objectively and without discrimination between system users. Article 35 provides that where the distribution system operator is part of a vertically integrated undertaking, it shall be independent at least in terms of its legal form, organisation

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<sup>1</sup> Date of registration by the Directorate General for Energy of the European Commission. The original request referred to a derogation from Articles 35 and 36; the Portuguese authorities subsequently clarified that the request also extends to Articles 4, 5 and 6 of the Directive (EU) 2019/944.

<sup>2</sup> Directive (EU) 2019/944 of the European Parliament and of the Council of 5 June 2019 on common rules for the internal market for electricity and amending Directive 2012/27/EU, OJ L 158, 14.6.2019, p. 125–199

<sup>3</sup> This is the first derogation request submitted by Portugal for the Berlenga island. Portugal has been granted similar derogations for the archipelago of Azores (see Commission Decision 2004/920/EC) and the archipelago of Madeira (see Commission Decision 2006/375/EC).

<sup>4</sup> The Berlenga island fulfils all the preconditions of a small isolated system. The consumption on the island has been well below 3.000 GWh for the past 30 years. There is no interconnection between the island and the country’s mainland electricity system, while the electricity system on the island is relatively basic, serving only a few customers with a low total annual consumption.

and decision-making from other activities not relating to distribution. Article 36 provides that distribution system operators shall not own, develop, manage or operate energy storage facilities.

Portugal wishes to modernise the island's electricity system and replace existing fossil power generation with more environmentally sustainable and renewable solutions. The electricity activities will be carried out by the main distribution system operator (DSO) of the country, E-REDES<sup>5</sup>, which is a legally unbundled distribution company and currently also responsible for the electricity system on the island. The derogation would concern the involvement of E-REDES in activities beyond distribution of electricity, particularly, the generation of electricity and the ownership/operation of storage facilities.

## **2. Specific characteristics of the Berlenga island**

The Berlenga archipelago, a UNESCO Biodiversity reserve since 2011, is situated 10 km away from Portugal mainland, part of the Peniche Municipality. It is composed of three groups of small islands from which only the biggest one, the Berlenga island, has some permanent establishments (one restaurant, two accommodations and small fishermen's houses) which were supplied with electricity through a small electricity system based on fossil fuels. It has recreational areas that are partial reserves, while the rest of the island is a full nature reserve accessible only for scientific research and environmental monitoring. The island is only inhabited for a few months of the year, mainly from May to September. Seasonal use of the island is strongly affected by the harsh sea conditions and the significant constraints arising from it being a biosphere reserve.

The severe environmental protection measures in place dictate that no further construction works are allowed on the island, except for the project converting the island's energy supply to a renewable system, under strict conditions of power, space and construction restrictions, as approved by the Instituto da Conservação da Natureza e das Florestas (Institute for Nature Conservation and Forests).

According to the information provided by the Portuguese authorities, the Berlenga island has an annual electricity consumption of about 30 MWh (approximately 0,0006% of total national electricity consumption) which has been relatively unchanged for the past 30 years. Due to the geographical restrictions, it is isolated from the mainland electricity system and the electricity consumed was produced onsite by three diesel generators that operated in an alternate mode.<sup>6</sup> The electricity supply follows the seasonality of activities on the island, which is closed during the winter months due to rough weather, while for the rest of the year it operates only during daytime.

There are 31 supply contracts, of which 8 are with the Peniche Municipality directly. The Municipality owns most of the buildings, including the only restaurant, which represents around 60% of the island's total consumption. E-REDES is the only electricity service provider on the island. Based on a concession agreement, the company is responsible for managing the grid, a small public lighting system and the electricity generators, as well as to ensure electricity supply to the final consumer.<sup>7</sup> All retail contracts are

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<sup>5</sup> Due to regulatory imposition, EDP Distribuição is now E-REDES. The Energy Services Regulatory Authority (ERSE) determined the separation of image between operators of the same economic group in the scope of the electricity sector, namely the Distribution Network Operator, in line with the indications of the European Commission. Accordingly, all references and/or images related to EDP Distribuição, as of January 29 of 2021, and for the due legal and regulatory effects, must be interpreted as a reference to E-REDES.

<sup>6</sup> The transportation of diesel by sea and the unloading under difficult weather conditions entails environmental risks from a potential accident.

<sup>7</sup> Assets will be returned to the Municipality at the end of the concession.

established as temporary<sup>8</sup> supply contracts with the last resource supplier in the municipality, “SU Eletricidade”<sup>9</sup> (a regulated undertaking that belongs to EDP group). E-REDES does not only serve this small isolated system but is also the main low voltage distribution system operator in mainland Portugal, under 278 municipal concession contracts for low voltage grids and the sole medium and high voltage distribution system operator, under public concession contract.

Currently, the generation costs of the Berlenga Island (capital expenditure, operation and maintenance expenditure) are included in the allowed revenues and recovered by the DSO through the regulated distribution network tariffs. Network tariffs are the same in all parts of the country. The last resort supplier applies regulated end-user tariffs, set and approved by the national regulatory authority.

### **3. Substantial problems for the operation of small isolated systems**

The application highlights the following substantial problems for the operation of the isolated electricity system:

- Due to the specific characteristics and small size of the island, very low electricity consumption (one restaurant, two accommodations and small fishermen's houses) the establishment of a competitive market in electricity is impractical, if not impossible to achieve.
- Given the small size and unique situation of the Berlenga island (seasonal and daily stop of supply, distance of 10 km from the mainland with frequent impossibility to reach the island, environmental restrictions forbidding any construction works apart from a very specific area designated to the project and under strict power limits), it would be very unlikely that any other company would invest in generation or storage assets and that any market activity of generation or supply would be feasible, let alone profitable.
- The size of the market will hardly stimulate the application for authorisations or bids for tenders. The level of consumption fluctuates widely during the year and is very low and seasonal.
- Several strict conditions are applied to human activity on the island, due the Portuguese environmental legislation and also the UNESCO Statutory Framework of the World Network of Biosphere Reserves.
- The distance to the mainland, combined with the aforementioned, makes it economically unfeasible to connect the network in the island to the mainland through an underwater power cable.
- There are no permanent inhabitants (civilians) on the Berlenga island and it is not feasible to have competition (environmental restrictions foreclose the installation of other competing generators on the island). Supply is heavily restricted, including electricity supply availability (only in day time) or the level of demand (maximum output of the generation is limited). The electric service is not continuous during the day and only operates in touristic high season. These characteristics impede the emergence of retail competition.

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<sup>8</sup> Due to consumption seasonality, at the end of each season (May to September) the supply contracts are terminated and then resumed the following season.

<sup>9</sup> ‘SU Eletricidade’ buys and sells electricity according to the regulated network tariffs and the prices set by the Energy Services Regulatory Authority - ERSE. As a supplier of last resort, SU Eletricidade guarantees the universal provision of electricity supply, mainly to domestic customers.

#### **4. Proposal for a new project subject to derogation**

Since recently the Berlenga island is being supplied by the new system (the construction ended in June-July 2020 and the equipment was tested and is currently already in operation), allowing to mitigate the previous risks associated to the generation by diesel generators, namely environmental risks, linked to the maritime transport of diesel, and environmental impacts on emissions, air pollution and noise. To fully decarbonise the electricity generation on the island and eliminate the environmental and safety risks, as well as the environmental impacts, associated with the current electricity generation system, Portugal implemented the ‘Sustainable Berlenga’ project. The purpose of this project is to provide an alternative supply of electricity that is environmentally sustainable and technically viable by replacing diesel-powered generation with generation using renewable energy sources.

The new project pays due attention to environmental parameters and is aimed at the development of a system based on renewable energy sources and new technologies. In particular, the project comprises the installation of solar photovoltaic panels (capacity 70 kWp) and battery storage (capacity 150 kWh), as well as a backup diesel generator.<sup>10 11</sup>

The market regime on the island would remain unchanged, with E-REDES, as the concessionaire of this local grid (part of the Peniche municipality low voltage grid concession),<sup>12</sup> owning and operating the distribution network as well as the generation assets on the island, until the low voltage grid concession expires. At the end of the concession, all the respective assets return to the municipality of Peniche.

In addition, E-REDES owns and operates the storage assets that support solar power generation, store excess electricity and inject it into the grid when the solar photovoltaic generation is not sufficient. This means that the storage facility will not be used for network purposes only, but rather be used as part of the generation infrastructure and for balancing purposes with a view to ensure that the electricity supply on the island is not disrupted.

The project does not have an end date, as it is a project that aims to ensure the energy supply of the Berlenga island in the long term. Due to this fact, Portugal requests the allocation of a derogation for a maximum period allowed by EU legislation.

#### **5. Article 66 conditionalities**

Under Article 66, derogations to certain provisions of the Electricity Directive are possible for the operation of small connected systems and small isolated systems. Derogations granted by the Commission must be limited in time and subject to conditions that aim to increase competition in and the integration of the

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<sup>10</sup> As stated above, the very strict environmental protection measures in place dictate that no further construction works are allowed on the island, except for the project converting the island’s energy supply to a renewable system, under strict conditions of power, space and construction restrictions, as approved by the Institute for Nature Conservation and Forests.

<sup>11</sup> Total costs are estimated to be below 50.000 EUR on an annual basis.

<sup>12</sup> In 2016, EDP Distribuição (now E-REDES) served 99.5% of the market (in the mainland) and had 6.099.905 customers. The other ten operators, together, serve 0.5% of the market with about 30.000 customers. They are small local communities organized as cooperatives that only operate in individual municipalities. In the autonomous regions (Azores and Madeira archipelagos) there are two vertically integrated undertakings that supply, in total, about 260.000 electricity customers.

internal market and to ensure that the derogations do not hamper the transition towards renewable energy, increased flexibility, energy storage, electromobility and demand response.

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