



## DÉLIBÉRATION NO 2017-182

# Deliberation by the French Energy Regulatory Commission of 27 July 2017 on the decision concerning the extension of the small-scale LNG vessel loading service at the Fos Cavaou terminal

Present: Christine CHAUVET, Catherine EDWIGE, Hélène GASSIN and Jean-Laurent LASTELLE, commissioners.

*Translated from the French: only the original in French is authentic*

### 1. BACKGROUND, CRE'S POWERS AND CRE REFERRAL

Small-scale LNG requirements are increasingly high and LNG terminal operators expect a major growth in this market in the medium term. The small-scale LNG vessel loading service at Fos Cavaou serves the market around the French Mediterranean coast.

In view of the development of new uses of LNG, Elengy and Fosmax LNG had already proposed that the French Energy Regulatory Commission (CRE) introduce a specific tariff for small-scale LNG offloading and loading operations when the previous tariffs for the use of regulated LNG terminals (ATTM4 tariffs) were updated. CRE's deliberation of 5 February 2015 deciding on the evolution, as at 1 April 2015, of the tariff for the use of regulated LNG terminals, introduced a specific tariff for offloading and loading small-scale LNG vessels carrying volumes lower than 20,000 m<sup>3</sup>. This specific tariff was renewed for the ATTM5<sup>1</sup> period.<sup>2</sup> However, the existing facilities at the Fos Cavaou terminal, operated by Fosmax LNG, are unable to receive vessels with volumes lower than 15,000 m<sup>3</sup>, whereas the small-scale LNG market needs identified by Fosmax LNG range mainly between 5,000 and 7,500 m<sup>3</sup>.

On 28 April 2017, Fosmax LNG forwarded a note to CRE specifying its proposals for the extension of the existing small-scale LNG vessel loading service at Fos Cavaou to volumes lower than 15,000 m<sup>3</sup>. This extended service would be proposed as from the start of 2019.

CRE consulted market participants about these extension arrangements from 18 May to 9 June 2017<sup>3</sup>. There were six contributors to this consultation: an infrastructure operator, three shippers, a shipper association and a trade union.

Article L.134-2, 4° of the French Energy Code empowers CRE to specify "the conditions for the use of [...] liquefied natural gas installations including the methodology for establishing tariffs for the use these [...] installations and tariff changes".

Article L.452-1 states in particular that the tariffs for the use of liquefied natural gas facilities "are established in a transparent and non-discriminatory manner so as to cover all of the costs incurred by these operators, provided that these costs correspond to those of an efficient system or facility operator. These costs take into account the characteristics of the service provided and the costs related to this service [...]".

Article L.452-2 of the Energy Code specifies that CRE shall define the methods used to establish the tariffs for the use of liquefied natural gas facilities; CRE is also competent, in accordance with the provisions of Article L.452-3 of that same Code, to deliberate about tariff developments.

The French Higher Energy Council, consulted by CRE on its draft decision, gave its opinion on 25<sup>th</sup> July 2017.

<sup>1</sup> CRE's deliberation of 18 January 2017 deciding on the tariffs for the use of the regulated LNG terminals

<sup>2</sup> CRE's deliberation of 5 February 2015 deciding on the evolution as at 1 April 2015 of the tariff for the use of the regulated LNG terminals

<sup>3</sup> Public consultation of 18 May 2017 No 2017-006 on the extension of the small-scale LNG vessel loading service at the Fos Cavaou terminal

CRE does not modify its decision with respect to the draft decision of 29<sup>th</sup> June 2017 it submitted to the Higher Energy Council.

## **2. NECESSARY INVESTMENTS AND SCHEDULE**

### **2.1 Investments envisaged by Fosmax LNG**

In order to adapt its terminal to smaller vessels, Fosmax LNG plans to carry out work on its facilities.

An initial investment of about €3 million will be required. It will enable Fosmax LNG to receive up to 50 small-scale LNG vessels, of a size ranging between 5,000 and 20,000 m<sup>3</sup> per year.

The investments envisaged by Fosmax LNG concern the transfer arms, the mooring systems and boarding and terminal access:

- the loading arms will be adapted to able connection of smaller vessels;
- new hooks will be placed on the jetty to receive vessels 100 metres or more length overall;
- boarding mechanisms will also be modified to take into account the lower deck height of small-scale LNG vessels;
- as for the terminal, the installation of a check valve on a second loading arm will serve to secure the loading service, including for large LNG vessels, through redundancy.

Fosmax LNG plans to make its investment decision based on an economic test aimed at ensuring that the initial subscriptions to the small-scale LNG vessel service will be sufficient to cover the marginal costs generated, essentially comprising the abovementioned investment sums. Because of the structure of the small-scale LNG market and given the results of the call for expressions of interest it launched, Fosmax LNG expects initial subscription commitments of a duration of roughly five years. Considering a minimum commitment of approximately €50,000 per operation, it concluded that the economic test would be successful if about 60 operations were booked over the five-year period.

If market demand was considerably higher than 50 small-scale LNG vessels per year, greater investments would be necessary to construct a second jetty. Such investments are not envisaged at this stage.

### **2.2 Schedule and CRE's decision**

Fosmax LNG presented the proposal to extend the service within the framework of the working group of Concertation GNL of 31 January 2017.

From 23 February 2017 to 30 March 2017, Fosmax LNG organised a call for expressions of interest, to collect market participants' needs and expectations concerning the small-scale LNG vessel loading service. Several participants expressed their interest in the extension of the existing service to smaller cargo volumes. The need expressed varies between 30 and 118 operations over the 2019-2023 period.

On 20 April 2017, Fosmax LNG forwarded a proposal to CRE concerning the arrangements for extending the service, in particular its proposal to modify the tariffs for small-scale LNG vessel loading and the rules for allocating loading slots during the selling phase.

On 26 June 2017, Fosmax LNG launched a binding selling phase with market participants. According to the subscription level, Fosmax LNG will make its final investment decision in summer 2017 based on the economic test described above.

As the case may be, Fosmax LNG will perform work in autumn 2018. It will be coordinated with annual maintenance work and will render the terminal unavailable for three consecutive weeks. All offloading capacity booked will be rescheduled over the remaining 49 weeks.

### **2.3 Answers to the public consultation**

All contributors to the public consultation are in favour of Fosmax LNG making the investments necessary for extending the small-scale LNG vessel loading service at Fos Cavaou, under the conditions set out in the economic test described in section 2.1. One contributor highlighted that LNG bunkering was a quick and reliable alternative to fuel, which would enable shippers to comply with the regulatory provisions governing air emissions from ships.

One contributor drew CRE's attention to the fact that this extension must not result in an increase in the tariffs of the services aimed at larger vessels.

## **2.4 CRE's analysis**

CRE considers that the extension of the small-scale LNG vessel loading service to cargo volumes lower than 15,000 m<sup>3</sup> can improve the attractiveness of Fosmax LNG's offer, and meet the increasing LNG needs for uses other than injection into the gas transmission networks.

It considers that the economic test proposed by Fosmax LNG to decide whether or not to make the planned investments can be used to incur these expenses without this leading to an increase in the terminal tariff. It corresponds to the behaviour expected of an efficient operator.

## **3. SCHEDULING RULES**

### **3.1 Fosmax LNG's proposal**

Fosmax LNG wishes to sell each year up to 50 slots devoted to the small-scale LNG vessel loading service.

Small-scale LNG vessel loading operations will be scheduled when the annual programme is established. In order to not disturb the scheduling of vessel offloading, the operations scheduled during establishment of the annual programme will be allotted a calendar week during which they may be carried out (and not a specific date). At the latest, by each Thursday preceding the week in question, this time period will be reduced to a three-day window. At least 24 hours before the start of the three-day window, the exact day during which the operation will take place will be decided.

### **3.2 Answers to the public consultation**

Most contributors are in favour of the scheduling rules proposed, which give visibility to shippers wishing to carry out small-scale LNG vessel loading operations while prioritising large vessels. Two contributors reiterated that the small-scale LNG vessel loading service offering must not affect the basic service aimed at traditional LNG vessels, which are inherently less flexible. In particular, it must not result in a reduction in the service offering (dedicated stock, rescheduling, etc.) proposed.

One contributor considers that the visibility given to small-scale LNG vessel loading is insufficient in Fosmax LNG's proposal, and that this would generate additional costs for shippers. It suggests, either reducing the window to three days two or three weeks earlier than proposed, or allotting the operation, during the establishment of the annual schedule, not a whole week, but a part of the week.

One contributor wishes for feedback to be given on the scheduling method proposed after 18 months of being in operation, so that it may be adapted as the case may be. One contributor wishes for the rules proposed to be supplemented, in the longer term and within the framework of the development of the LNG bunkering activity, by an offer that gives more flexibility to shippers wishing to schedule this type of operation.

### **3.3 CRE's analysis**

CRE considers that the vessel offloading operations must remain a priority over the other operations carried out by Fosmax LNG.

It is therefore in favour of the scheduling method proposed by Fosmax LNG, which, on the one hand, gives visibility to clients wishing to load small-scale vessels, and on the other hand, prioritises vessel offloading, including when there is a late rescheduling of such an operation.

These rules can however be adapted, depending on the feedback which will be compiled by Fosmax LNG and by shippers. Terminal operators expect the service to expand as from 2022-2023. CRE therefore considers that reviewing the selling arrangements and in particular the scheduling provisions for the small-scale loading service could be beneficial as part of work to prepare the ATTM6 tariffs for the use of the regulated LNG terminals, set to enter into effect as at 1 April 2021.

## **4. SERVICE PRICING**

### **4.1 Fosmax LNG's proposal**

Fosmax LNG proposes, for each small-scale LNG vessel (lower than 20,000 m<sup>3</sup>) loading operation, a price equal to the maximum between a fixed rate of €50,000 and a variable rate applied to the volume loaded, of €1.5/MWh.

The calculation formula proposed is therefore as follows: Price = Max (€50 k; €1.5/MWh)

### 4.2 Answers to the public consultation

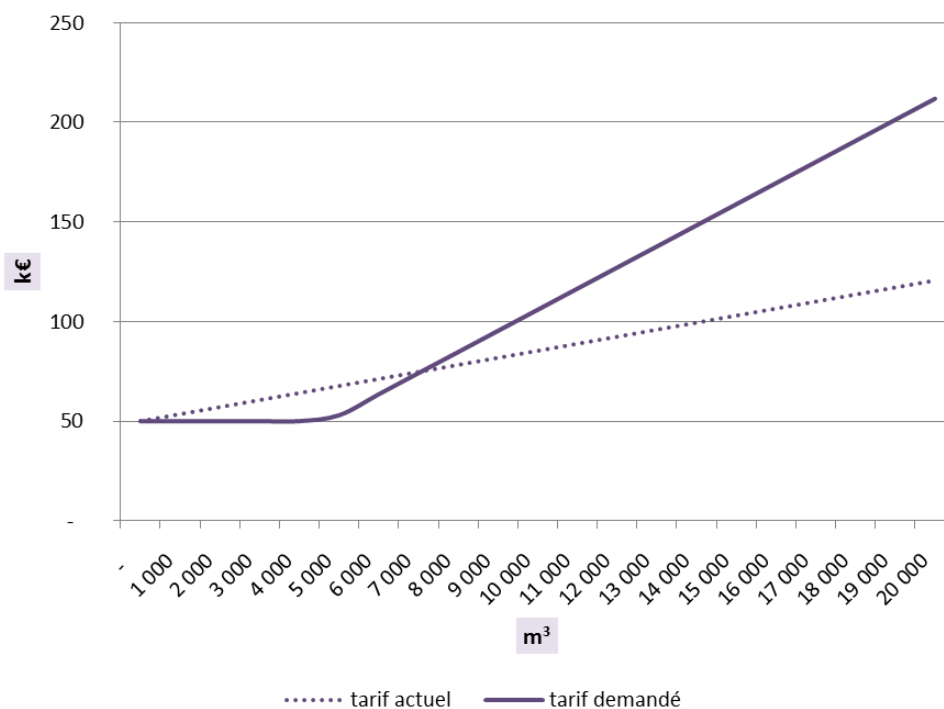
Most contributors are in favour of the tariff proposed, which both covers the additional costs generated by the provision of the service, and reduces the price of the other regulated services that come under shared terminal infrastructure use.

Two contributors consider that the tariff proposed is too high and could hinder the development of the LNG bunkering activity in the French terminals. One contributor suggests adopting a tariff close to €1/MWh loaded.

### 4.3 CRE's analysis

In its deliberation of 18 January 2017<sup>4</sup> ATTM4 deciding on the tariffs for the use of regulated LNG terminals, CRE maintained the price of a small-scale LNG vessel loading operating at the price in effect during the second ATTM4 tariff period, i.e. a fixed rate of €50,000 per operation and a variable rate of €0.5/MWh.

The following table compares the price proposed by Fosmax LNG with the current price.



CRE considers it necessary for the tariff of a small-scale LNG vessel loading operation to cover the additional costs generated by the provision of this service, and also for it to cover a portion of the costs associated with the shared use of terminal infrastructure.

- Additional costs generated by the provision of the small-scale LNG vessel loading service.

The additional costs generated by the provision of this service are mainly the capital expenses associated with new investments. On the basis of the elements forwarded by Fosmax LNG, these capital expenses are estimated at an average €0.3 million/year over the 2019-2023 period.

Marginal operating expenses are estimated by Fosmax at €17,000/year on the basis of 40 operations per year, which corresponds to the annual subscriptions expected during the ATTM5 tariff period once the service is launched.

Item	Overall annual cost to be covered by the service	Average cost to be covered per operation
Marginal capital expenses	€0.3 M	€~7 k
Marginal operating expenses	€~17 k	€~0.4 k
<b>Total</b>	<b>€0.32 M</b>	<b>€~7.4 k</b>

<sup>4</sup> CRE's deliberation of 18 January 2017 deciding on the tariffs for the use of the regulated LNG terminals



- Costs related to use of infrastructure shared between the small-scale LNG vessel loading service and the other services proposed by Fosmax LNG.

The costs shared between this service and the existing services are the capital expenses related to the use of the jetty and this service's share in the operating expenses of the terminal.

Hereunder, CRE proposes an assessment, based on 40 small-scale LNG vessel loading operations per year, of the sums that will be deducted from the price of the other services proposed by Fosmax LNG, as part of shared infrastructure use. For this assessment, the distribution key for the capital expenses is the duration of use of each service.

Taking into account the common assets necessary for small-scale LNG vessel loading operations identified by Fosmax and by applying a key related to the duration of use proposed by Fosmax, the capital expenses related to the use of the jetty which can be allocated to the small-scale LNG vessel loading service are estimated at an average €1.1 million/year over the 2019-2023 period.

By comparing this sum to the terminal's overall capital expenses, a key is deducted, which, when applied to the terminal's operating expenses gives an assessment of this service's share in the terminal's operating expenses. This amount is estimated at an average €0.6/year over the 2019-2023 period.

Item	Overall annual cost to be covered by the service	Average cost to be covered per operation
Common capital expenses	€1.1 M	€~28 k
Common operating expenses	€0.6 M	€~15 k
<b>Total</b>	<b>€1.7 M</b>	<b>€~43 k</b>

The sum of these costs is therefore about €50,000 per operation.

On the basis of the service subscription assumptions presented above, the price proposed by Fosmax LNG will cover the costs of a small-scale LNG vessel loading operation. CRE is therefore in favour.

It may be revised within the framework of the ATTM5 tariff update or during ATTM6 tariff work, depending on the interest expressed by the market in the small-scale loading service, and, as the case may be, more favourable subscription assumptions.

## **5. RULES FOR THE LOADING SLOT OFFERING**

### **5.1 Fosmax LNG’s proposal**

Fosmax LNG proposes to launch a binding selling phase with market participants in summer 2017.

It proposes to allocate loading slots according to the demands received and with the following priority rules:

- if demand is higher than supply, priority is given to the subscriber requesting the greatest number of slots over the 2019-2030 period;
- in the event of a tie, priority is given to the subscriber requesting the greatest number of slots over the 2019-2020 period;
- in the event of a tie, priority is given to the subscriber requesting the greatest number of slots over the closest period, year by year, from 2021-2030;
- in the event of a tie, the subscriber having priority over the allocation of slots will be designated by a drawing of lots. This will be done under the supervision of a bailiff.

If all of a participant’s demands are not met, this participant may either choose to be given the remaining capacity or withdraw its subscription demand. At the end of this selling phase, and if Fosmax LNG decides to launch this service, slot reservation will be done on a first-come, first-served basis.

### **5.2 Answers to the public consultation**

Most contributors are in favour of the selling rules proposed by Fosmax LNG.

One contributor wished for reservations to be split up, so as to satisfy a greater number of subscribers and possibly give a seasonal nature to slot scheduling.

One contributor suggested implementing an allocation process in several rounds in order to satisfy a range of participants, while giving priority to the participant with the greatest demand. It also considers that the first-come, first-served rule to allocate slots remaining vacant following the annual scheduling lacks transparency, since the time schedule even for operations booked on an annual basis is reduced to a three-day window only on the Thursday before the week during which the operation is set to take place.

### **5.3 CRE's analysis**

CRE considers that the rules for the loading slot offering proposed by Fosmax LNG are coherent. It considers it appropriate, to secure the operator's investment, to give priority to the participant with the greatest demand, and to subscribers ready to commit over the long term.

In addition, CRE considers that the use of the first-come, first-served rule to allot slots remaining vacant guarantees non-discriminatory access to capacity not reserved. This rule is implemented regularly by terminal operators to allocate for example, offloading slots not booked following the regasification selling phases and gives great flexibility to the booking of capacity remaining available.

## **6. CRE'S DECISION**

CRE has decided on the development of the small-scale LNG vessel (lower than 20,000 m<sup>3</sup>) loading service at Fos Cavaou, under the conditions described in the present deliberation and provided that the economic test described in section 2 of the present deliberation is successful.

The tariff for a small-scale LNG vessel loading operation at Fos Cavaou is calculated based on the following formula: Max (€50 k; €1.5 €/MWh)

Fosmax LNG will present, within the framework of Concertation GNL, before 31 October 2020, feedback on the functioning of the small-scale LNG vessel loading service at Fos Cavaou.

Paris, 27 July 2017

**For the Energy Regulatory Commission,  
A commissioner,**

**Christine CHAUVET**