Storage network tariffs: points of orientation

16 January 2026

AgNes determination proceedings (GBK-25-01-1#3)

1. Introduction

The Bundesnetzagentur's Grand Ruling Chamber for Energy opened proceedings for the determination on the general electricity network tariff system (AgNes) for the period once the Electricity Network Tariffs Ordinance (StromNEV) has ceased to be in effect in accordance with section 29(1) in conjunction with sections 21 and 21a of the Energy Industry Act (EnWG) on 12 May 2025 [GBK-25-01-1#3].

Upon opening the proceedings, the Bundesnetzagentur published a discussion paper that presented the changes in the framework conditions brought about by the energy transition, a target vision, an analysis of the current situation, a comparison between the current situation and the target vision, and initial adaptation options based on this. The responses to the subsequent consultation on the paper and the contributions in the industry workshop held at the beginning of June 2025 helped to set out the various players' target visions and ideas and point to the advantages and disadvantages of different adaptation options. Taking into account these findings and in close dialogue with the experts commissioned to produce reports for the AgNes process, the Bundesnetzagentur has condensed the scope for options and worked out some concrete proposals. These proposals will now be discussed in detail and examined for their practicability in expert workshops.

It is necessary to distinguish between different technical connection situations and different economic operating methods for electricity storage facilities.

The key factor in the technical connection situation is whether the storage facility has its own physical network connection and uses the network capacity at this point exclusively or whether there are other generation/consumption units at the same network connection. This can be expressed with the following pair of terms:

Case group 1: stand-alone storage facilities (technical) or grid-connected storage facilities (economic)

Case group 2: co-located storage facilities (technical) or multi-use storage facilities (economic)

In addition, there are two different economic operating methods:

Purely grid-connected storage facilities are used solely for arbitrage (and for the provision of balancing energy, including inertia), in that the electricity they consume from the network is solely put into storage and the electricity they produce is solely fed into the network.[1]

Multi-use storage facilities are used for more than one purpose: for arbitrage, for smoothing out withdrawals from the network, for optimising consumption and for optimising renewable energy or combined heat and power (CHP) marketing and support. In practice, not all multi-use storage facilities are used for all purposes at the same time. Multi-use storage facilities are always technically connected as co-located storage facilities. Pure **green electricity storage facilities** are a subgroup of multi-use storage facilities; they are used solely for optimising consumption and, in some cases, for optimising renewable energy marketing and support. Home energy storage systems are operated today as pure green electricity storage facilities.

Previously, purely grid-connected storage facilities newly installed up to 4 August 2029 were exempt from network tariffs for 20 years under section 118(6) sentence 1 EnWG. Since the amendment of section 118(6) sentence 3 EnWG in December 2025, the provision also applies to electricity storage facilities that feed only part of the electricity taken out of storage back into the same network. Under section 118(6) sentence 2 EnWG, pumped storage facilities whose electrical pump or turbine capacity was provably increased by at least 7.5% or whose storable energy capacity was provably increased by at least 5% after 4 August 2011 are exempt for a period of 10 years from the date they are put into operation from network tariffs on the electrical energy withdrawn for storage. This storage technology is also covered by the following deliberations.

The provisions in section 118(6) EnWG are applicable until 4 August 2029; sentence 12 enables the Bundesnetzagentur to set divergent rules, including on the period of applicability. The Bundesnetzagentur's firm view is that full exemption from network tariffs is not tenable under European legislation and is not expedient in energy policy terms. Behavioural incentives can only be created if network tariffs are generally payable; these incentives are feasible and useful especially for storage facilities and electrolysers. Furthermore, network tariffs and the behavioural incentives that can only be created through these tariffs can help to mitigate problems in enabling connections and act as an additional income component in certain scenarios.

Electrolysers are currently exempt from entry tariffs in the gas network; as regards electricity, they are exempt under section 118(6) sentences 1 and 7 EnWG from electricity network tariffs and

[1] In this paper, the term "arbitrage" is always taken to include the provision of balancing energy.

for the time being are subject to the provisions and cost distribution under section 19(2) StromNEV until 31 December 2028.

With respect to planning certainty for those planning and financing such projects, it is important to provide for clarity about a future tariff system as early as possible and ensure orderly transitional periods.

This paper presents the current status of discussions on the design of network tariffs for storage facilities. It addresses both purely grid-connected storage facilities and multi-use storage facilities. The paper also deals with electrolysers, which similarly to storage facilities are currently exempt from network tariffs up to August 2029.

2. Past events: AgNes discussion paper, consultation responses and European comparison

AgNes discussion paper and consultation responses

In May 2025, the Grand Ruling Chamber opened proceedings for the determination on the general electricity network tariff system (AgNes) and published a discussion paper. One of the topics the discussion paper looked at was tariffs, including exemptions and discounts, for storage facilities. The conclusion was that a full exemption for storage facilities was no longer tenable because it neither takes into account that storage facilities also cause network costs nor creates incentives for network-beneficial behaviour. Consideration will therefore have to be given to alternative options for regulating storage facilities that restrict the operation of the facilities as little as possible but that ensure that storage facilities, as network users, contribute financially to the network costs and also incentivise network-beneficial usage behaviour. The Bundesnetzagentur received numerous responses to the discussion paper from various players. The large majority of respondents saw special treatment for storage facilities as justified or even necessary. Storage facilities were said to provide flexibility in the system and promote better integration of electricity from renewable energy sources. Efficient use of storage facilities and network-oriented use of the facilities at decisive times were said to offer huge potential for savings in redispatching costs. Dynamic (as opposed to static) energy-based prices adjusted to the individual congestion situation and based on average redispatching costs were seen as a suitable tariff component. Some respondents proposed giving discounts on the power-based tariff to large-scale facilities that relieved the network. By contrast, other respondents stated that no special treatment would be needed for storage facilities if a fully dynamic network tariff was introduced or that storage facilities should pay for using the network like any other player.

Storage tariffs: European comparison

The Bundesnetzagentur put out a tender for a report comparing European network tariff systems and network tariffs. BET Consulting GmbH was subsequently commissioned and conducted a

comparison between eleven European countries[2] with structural characteristics similar to Germany and between these countries and Germany.

The report showed that the majority of the countries in the comparison do not have any special network tariffs or exemptions for storage facilities. Instead, storage facilities are treated like producers or consumers, or both, and so pay regular network tariffs, in some cases for both the electricity they withdraw and the electricity they feed in. France is planning a storage tariff that offers customers with symmetrical withdrawal and feed-in behaviour an adjusted tariff based on the difference between their feed-in and withdrawals.[3] Storage facilities are exempt from network tariffs in a few individual cases.

[2] Austria, Belgium, Denmark, France, Great Britain, Italy, Luxembourg, the Netherlands, Norway, Switzerland, Spain
[3] Commission de régulation de l'énergie, 2025, pages 129-137

3. Summary

- The potential of storage facilities to balance out fluctuations in generation in the future energy supply system should be used as well as possible. It is necessary to lay the right foundations for this through the network tariff system. At the same time, it must be ensured that storage facilities make a reasonable contribution to financing the network costs.
- The Ruling Chamber's proposal is to essentially apply the basic model outlined for the general network tariff system in the points of orientation of 20 November 2025 to storage facilities. However, the model has to be modified in order to avoid disincentives against welfare-beneficial arbitrage or relating to the provision of ancillary services.
- The contribution to network financing is made through the tariff with a financing function. If injection tariffs with a financing function are introduced, storage facilities should not be made to contribute twice to network financing – once as producers and once as consumers.
- Disincentives against their rational use for arbitrage or the provision of ancillary services can mainly result from tariffs with a financing function if energy-based prices are applied. To avoid this, the Ruling Chamber proposes applying energy-based prices only to the amounts of electricity withdrawn but not fed back into the network, at least for the amounts within the chosen capacity; this is referred to below as "netting".
- If netting is implemented as proposed, the choice of the capacity-based price within the financing function cannot be completely free (minimum capacity).
- Multi-use storage facilities could have a special role. One option would be not to apply network tariffs to these facilities separately but to the connection point as such. This would reduce the level of complexity.
- Network tariffs with an incentive function should also be applied, and applied first, to storage facilities in order to incentivise network-beneficial or at least network-compatible usage. The use of grid-connected storage facilities, in particular, has a direct effect on the network load; at the same time, storage facilities can respond very dynamically to signals. Storage facilities are also technically well suited to responding to incentives. Dynamic energy-based prices with an incentive function can and should be introduced considerably earlier for storage facilities than for other network users.
- The design of positive and negative energy-based prices with an incentive function will avoid network tariffs being paid twice. Only the incentive component arising from the individual network situation will be payable. This would provide significant scope for optimisation for storage facilities, which would be justified if the responses from the facilities have a cost-reducing effect on the network.
- The energy-based prices with an incentive function should be based on the behaviour of storage facilities in practice and not on theoretical potential.
- The network tariff rules for storage facilities should apply to all types of facility. In the Bundesnetzagentur's view, the participation of storage facilities in the electricity trading and balancing energy markets under unequal network tariff conditions does not seem economically sensible and also raises considerable doubts related to non-discrimination. Section 118(6) EnWG allows this proposed equal treatment for all storage facilities in operation as from 2029, taking into account the protection of legitimate expectations and not least through the provision in sentence 12 enabling the Bundesnetzagentur to set divergent rules.

- Storage facilities should continue to pay construction cost contributions. The contributions should still be based on connection capacity. Construction cost contributions will not be charged retrospectively.
- Electrolysers cannot be treated exactly the same as storage facilities. Reasonable adjustments, at least to the network tariffs with a financing function, are necessary and conceivable.

4. Current status of discussions on storage network tariffs

General observations

Section 118(6) sentence 12 EnWG enables the Bundesnetzagentur to set rules diverging from the provisions of section 118(6) EnWG, including on the period of applicability of the provisions. Any amendment is to be announced in good time and with transitional periods. Early discontinuation of the full exemption on a certain date, which would create a level playing field, would be legally possible. Potential legitimate expectations would have to be taken into account. The Ruling Chamber will examine to what extent such legitimate expectations exist, in particular in light of the weighty economic arguments in favour of equal treatment for all storage facilities in operation. The judgment of the European Court of Justice of 2 September 2021 (case C-718/18) on the independence of the Bundesnetzagentur as the national regulatory authority is likely to have undermined expectations of the full exemption under section 118(6) EnWG being continued. The Act amending energy industry law to take account of Union law and amending other provisions of energy law of 29 December 2023 (Federal Law Gazette 2023 I No 405) consequently made clear that there were no longer legitimate expectations of this full exemption being continued. The Act includes the provision enabling the Bundesnetzagentur to set divergent rules on the period of applicability of the provisions.

Contrary to what was implied by some respondents to the discussion paper, a special network tariff that is justified by energy policy reasons not only has to be able to result in system-beneficial or network-beneficial contributions but also has to actually require system-beneficial or network-beneficial usage. The way storage facilities are operated ultimately depends on the primary purpose of their installation or operation, for example for arbitrage, self-consumption or load optimisation. The use of storage facilities in itself does not necessarily have welfare effects.

Given the immediate applicability of European legislation, as far as it is implemented in EU Regulations, it is also necessary to take into account the principle of non-discrimination in Article 18(1) second subparagraph of Regulation (EU) 2019/943. According to this provision, network tariffs must not discriminate either positively or negatively against energy storage or aggregation and must not create disincentives for self-generation, self-consumption or participation in demand response. In light of this, a special network tariff is only legally justified if a special, network-beneficial or system-beneficial behaviour is displayed and if – without a special tariff – the disincentives specified in the provision may arise.

In the Ruling Chamber's view, it therefore makes sense for the general network tariff system to essentially apply to storage facilites as well, as in the majority of the countries in the above-mentioned comparison conducted by BET Consulting GmbH. According to the current status of discussions, the basic model of the general network tariff system for customers at or above the medium voltage level and for customers at the low voltage level with an annual consumption exceeding 100,000 kWh will distinguish between network tariffs with a financing function and network tariffs with an incentive function.

Network tariffs with a financing function

Grid-connected storage facilities

In light of the principles of cost orientation and non-discrimination, storage facility operators should also contribute to financing the network costs. Modifications are to be made to the tariff with a financing function in the basic model, if necessary for storage facilities.

Irrespective of the question of whether tariffs will be charged for feed-in under the future network tariff system, the Ruling Chamber believes that storage facilities should not have to pay tariffs with a financing function both for withdrawals from the network and for feed-in into the network.

Electricity storage facilities primarily serve arbitrage purposes, that is the balancing of short-term fluctuations in prices in the day-ahead or intra-day electricity trading markets. This arbitrage function is economically useful. It levels out large price fluctuations and improves the integration of renewable generation into the electricity markets. As high prices are a sign of a shortage, facilities that help to avoid peaks in prices also contribute to security of supply. The Bundesnetzagentur's security of supply monitoring confirms this. Storage facilities can also make an important contribution in the balancing capacity markets because they can provide quick responses in line with the provisioning times for balancing capacity products.

The following deliberations in the first place relate to tariffs for withdrawals by storage facilities. If injection tariffs with a financing function were introduced, it would be necessary to determine whether storage facilities should contribute to financing the networks through their withdrawals or their feed-in. In the points of orientation on network tariff components published on 20 November 2025, the Ruling Chamber presented the planned basic model for interval-metered customers comprising separate network tariffs with a financing and an incentive function. Network tariffs with a financing function serve to cover network costs. The Ruling Chamber proposed changing the power-based tariff component into a capacity-based component. This would not be based either on contractually booked capacity or on technical network connection capacity but on capacity chosen by the network user (ordered capacity). The Ruling Chamber also proposed keeping and modifying the energy-based price component. A network user would pay a lower energy-based price (AP1) as long as the user's consumption was within the chosen capacity. If the network user's consumption exceeded the ordered capacity, however, the user would pay a higher energy-based price (AP2) for the amounts above the ordered capacity.

This model can essentially be transferred to storage facilities. Like other network users, they can calculate the optimum amount of capacity to order based on the relevant prices and depending on their individual consumption profile. A minimum capacity threshold could be set in order to ensure a more cost-reflective financing contribution from storage facilities. An alternative option would be for a minimum capacity of zero to apply unless a higher capacity is chosen. Zero capacity would mean that the higher energy-based price (AP2) would be charged for all consumption. However, as mentioned earlier, it has to be taken into account that the use of storage facilities may well have welfare effects that should not be hindered. Network tariffs that merely serve to finance the network and that are not designed to reflect the costs directly caused can lead to less efficient usage and thus reduce these welfare effects. In the case of grid-connected

storage facilities, these effects result from market-beneficial arbitrage transactions or the provision of ancillary services. A reasonable balance has to be achieved between the interest in a financing contribution from storage facilities and the benefits to welfare from connecting the facilities.

Power-based tariffs increase fixed costs and can therefore inhibit investment. In the basic model proposed by the Ruling Chamber, however, this effect is comparatively small because connection owners are more or less free to choose their capacity. By contrast, the energy-based price components cause an additional cost burden for each individual usage, which can reduce the efficiency of using the facilities.

The Ruling Chamber is considering applying the energy-based price only to the amounts remaining after netting, that is only to the amounts of electricity withdrawn but not fed back into the network. In the case of purely grid-connected storage facilities, the capacity-based price would therefore function as in the basic model, but the energy-based price would only be charged for storage losses. The amounts of electricity fed back later into the general supply network for the benefit of the market or the network would be exempt from the energy-based price. It has to be decided whether to make a distinction between the two energy-based prices (AP1 and AP2) or whether to apply the netting to both. It also has to be decided which of these prices to apply to the net amounts. The higher energy-based price (AP2) in the basic model generally serves to incentivise a rational choice of capacity. Withdrawals exceeding the chosen capacity are to be possible. The capacity chosen for storage facilities is expected to be low because of the application of netting.

All withdrawals exceeding the chosen capacity could be subject to tariffs in addition to the balance of withdrawals and feed-in. The higher energy-based price (AP2) would take full effect in this case as well. This could achieve better planning of capacity. The lower energy-based price (AP1) would always apply to the net amounts within the chosen capacity. However, this would create a very strong incentive not to use the scope of flexibility between the ordered capacity and the network connection capacity contractually agreed with the network operator. In the case of storage facilities, however, this effect is not only to be seen as negative. The demand for capacity from storage facilities is a particular problem for network operators that leads to numerous follow-on problems in network connection. Furthermore, the flexibility of storage facilities is not restricted by a natural supply of energy or by other production processes. An adequate calculation of the capacity needed is therefore relatively easy and reasonable for storage facilities.

If, irrespective of the chosen capacity being exceeded, an energy-based price is only to be charged for the net amounts, the question arises of how to determine the price payable. It would be difficult to physically determine whether the electricity not fed back into the network had been withdrawn during a period when the capacity was exceeded. Various options are conceivable:

a) The lower energy-based price (AP1) could be payable for all the amounts remaining after netting. This would mean, however, that the effect of the higher energy-based price (AP2) in the event of the capacity being exceeded would be lost.

b) Another option would be just to charge the higher energy-based price (AP2). This would mean, however, that storage facilities would have to pay a higher price even if the chosen capacity was not exceeded; this would lead to direct discrimination compared with other network users under the general network tariff system.

c) If an energy-based price is only to be payable for the net amounts, irrespective of the capacity being exceeded, it seems necessary in view of the problems associated with options a) and b) to price the net amounts using a weighted average energy-based price with a financing function. This would be calculated ex post as follows. First, the amounts withdrawn within the chosen capacity would be separated from those exceeding the capacity. Second, the ratio of the amounts within and exceeding the capacity would then be applied to the net amounts; the lower price (AP1) would be payable for one part and the higher price (AP2) for the other part. This approach would have the advantage that any amounts exceeding the capacity would be taken into account.

Questions

- Should the higher energy-based price (AP2) be payable for all withdrawals exceeding the chosen capacity or should prices generally only be payable for the net amounts?

Multi-use storage facilities

In the case of multi-use storage facilities without their own network connection point, a distinction has to be made based on the purpose of the facility. The boundaries between producers and consumers are becoming increasingly blurred, especially through the use of storage facilities. One option would be not to consider each individual unit behind a connection point, but to base the network tariff simply on the overall effect "felt" in the network. This would avoid distinction problems. Unlike with grid-connected storage facilities, it would not be necessary to make special modifications to the basic model. However, an overall assessment without specifically distinguishing between the storage facilities' different amounts would give rise to disincentives with respect to the use of the facilities. Various scenarios are looked at below.

Stationary storage facilities for consumption optimisation

Storage facilities are used at commercial and industrial sites and by private households to optimise the consumption of self-generated electricity. In these cases, electricity may well also be fed into the network. Nevertheless, the network is mainly used for the withdrawal of electricity. The network user mostly has the characteristics of a consumer, to whom the storage facility is allocated.

Industrial sites, for instance, often have their own power plants that are primarily used to supply their own production facilities. Some of the electricity produced by the power plants is marketed and so fed into the general supply network, but the amount of electricity withdrawn is considerably larger. Storage facilities can be used in these cases to optimise the economically efficient use of electricity. Where storage facilities and, in some cases, generating installations are operated at an industrial site alongside production facilities, the current legal situation gives rise to various scenarios in practice.

While feed-in as such is not relevant for the charging of network tariffs, as long as no injection tariffs are charged, consumption behaviour at the connection point is decisive for calculating the network tariff for the electricity withdrawn.

In some cases, however, individual withdrawal points are treated separately. This is the case in particular if individual network tariff agreements, for example under section 19 StromNEV, are in place for separate withdrawal points. There are cases, for instance, in which reduced network tariffs under section 19(4) StromNEV (possibly in conjunction with section 19(2) sentence 1 StromNEV) are payable for a storage facility but an individual network tariff under section 19(2) sentence 1 or 2 StromNEV is payable for a production facility. The recent amendment to section 118(6) sentence 3 EnWG by the Act amending energy industry law to strengthen consumer protection in the energy sector and amending other provisions of energy law also allows an exemption under section 118(6) sentence 1 EnWG for amounts that are put into and taken out of a storage facility for market-oriented reasons where some of the amounts taken out are used by consumers within the connection point.

In other cases, the separate treatment of storage facilities, other consumer devices and generating installations results from the economically understandable and often sensible attempt to be allowed to keep the financial support under the Renewable Energy Sources Act (EEG) for the energy stored from the local generating installation but be able to use the storage facility for arbitrage transactions as well. The Bundesnetzagentur has presented its proposals on this and other aspects in the draft "MiSpeL" determination on the market integration of storage facilities and charge points.

The question is whether the future network tariff system should still allow the separate calculation of network tariffs for multi-use storage facilities, in which case individual network tariffs would be payable for the use of these facilities. In the case of storage facilities used for optimisation for consumers that themselves pay tariffs under the general network tariff system, there is essentially no need for separate treatment of the storage facilities. The financing contribution is made uniformly through application of the basic model for the connection point.

There are also cases where stationary storage facilities are used to optimise the network tariff-related load in order to prevent peaks in power demand or meet the criteria for a special network tariff; these are similar to storage facilities for consumption optimisation.

Mobile storage facilities

Mobile storage facilities are usually found at the low voltage level. Their primary purpose is mobility. Their secondary purpose can be to help to optimise consumption by enabling electricity to be fed back into a household to a certain extent. In the case of network users at the low voltage level with an annual consumption exceeding 100,000 kWh, reference can be made to the comments on stationary storage facilities for consumption optimisation. There are no obvious reasons for different treatment. The treatment of mobile storage facilities for consumers with an annual consumption up to 100,000 kWh largely depends on the general rules for this group. The Ruling Chamber addressed this issue in the points of orientation on network tariff components published on 20 November 2025; it outlined proposals aimed at ensuring an adequate

contribution to the network costs from prosumers, who often have mobile storage facilities. With respect to mobile storage facilities, it would be conceivable to restrict the network tariff with a financing function to the net amounts, provided that these amounts can be distinguished. This would mean that amounts used for mobility would be subject to a network tariff, while amounts fed back into the network would not. However, there would then be a problem if a consumer also participated in module 3 of determination BK8-22/010-A with a time-variable energy-based price: if the network tariff was restricted to the net amounts, it would be necessary to determine when which proportion of the amount not fed back into the network had been withdrawn from the network, and this would be extremely difficult.

Storage facilities co-located with renewable energy installations

The purpose of storage facilities co-located with renewable energy installations is usually to limit network connection costs. They can also be used to optimise income by putting electricity generated from renewable sources into storage and feeding it into the network later when spot market prices are high. A market-beneficial effect is already inherent in the latter because additional amounts can not only mitigate periods of high prices but also avoid periods of negative electricity market prices; this in turn can improve the business case for the installations and ultimately reduce the need for support.

The treatment of this scenario depends in the first place on whether or not tariffs with a financing function are charged for feed-in. If they are not, tariffs with a financing function will only be applied to withdrawals anyway. As with storage facilities for consumption optimisation, the question is again whether the amounts withdrawn from the general supply network by the storage facilities should be calculated separately and subject to the modified basic model. Unlike with storage facilities for consumption optimisation, there would at least not be the risk of abuse by "disguising" final consumption as storage losses.

Separate treatment of withdrawals from the network by storage facilities could make sense in order to incentivise use for arbitrage or the provision of ancillary services. The Ruling Chamber therefore proposes to apply the modified basic model with the energy-based price to the net withdrawal amounts, as with purely grid-connected storage facilities. The point to be discussed is again which price to apply to the amounts not fed back into the network (the lower energy-based price (AP1), the higher energy-based price (AP2) or a weighted average energy-based price).

If injection tariffs with a financing function are introduced, it has to be ensured that tariffs are not paid twice for amounts that a storage facility withdraws from and then feeds back into the network. It would again be necessary to distinguish between the storage facility's different amounts because the tariff with a financing function would be payable for the amounts fed in by the renewable installation. It seems to make sense to apply the modified basic model in this scenario as well.

Questions

- How high is the potential of storage facilities co-located with renewable energy installations to be used for other purposes as well?

- Should the higher energy-based price (AP2) be limited to net amounts or should it be payable for all amounts exceeding the chosen capacity?

Network tariffs with an incentive function

In the points of orientation on network tariff components, the Ruling Chamber proposed having a tariff with an incentive function in addition to the tariff with a financing function. The purpose of the tariff with an incentive function is not to ensure a contribution to cover network costs but to incentivise cost-efficient network usage behaviour. The proposed basic model has a dynamic, symmetrical positive or negative energy-based price. This would supplement the two energy-based prices with a financing function (AP1 and AP2).

While the proposed netting for the storage tariffs with a financing function aims to avoid disincentives against market-oriented flexibility or the provision of ancillary services, the dynamic energy-based price aims to create incentives for actual network-beneficial behaviour. Such a tariff with an incentive function makes sense specifically in the case of storage facilities; in view of the comparatively small technical hurdles, high price sensitivity and metering systems already in place, it can also be implemented considerably earlier for storage facilities than for other network user groups. In the Ruling Chamber's view, the aim should be to introduce dynamic energy-based prices for storage facilities in 2029, at least in the transmission network and at the high voltage level.

If tariffs with an incentive function were to be introduced for feed-in, there may well be incentives for storage facilities with respect to both withdrawal and feed-in. Unlike with the tariffs with a financing function, there is no risk of tariffs being paid twice because the tariff with an incentive function is not aimed at securing contributions to cover costs. On the contrary, storage facilities will have a high chance of additional income on account of their high level of flexibility and in view of the proposed symmetrical positive or negative pricing. Positive income from the tariffs with an incentive function may well be justified if it is accompanied by behaviour that actually reduces network costs. Applying tariffs with an incentive function to both withdrawals and feed-in would avoid location-related disadvantages because the chances of income from a congestion-based dynamic network tariff for withdrawals or feed-in naturally depend on which "side" of congestion a storage facility is located.

The point to be discussed is whether the balance of the tariff with a financing function and the tariff with an incentive function can be zero or negative. One argument in favour is that the overall income earned would be justified by the network-beneficial contribution from the usage behaviour. Unlike with section 118(6) sentence 1 EnWG, for example, the significant network tariff privilege would be counterbalanced by a real benefit for all network users.

Questions

- Should a negative balance from the tariffs with a financing function and an incentive function be possible for storage facilities or is a minimum contribution to cover network costs required?

- What is your view on the feasibility of the introduction of dynamic tariffs for storage facilities in 2029? Which hurdles do you see?

5. Construction cost contributions

In addition to the tariff components with an incentive function described in the previous section (4) that aim to address short-term variable network costs in the form of congestion costs, incentives are needed with respect to the network expansion costs directly caused by network connection. These costs are driven by the decision on the network connection point and network connection capacity. To internalise these costs, a component related to network connection capacity such as a construction cost contribution is therefore particularly suitable, as this has a direct effect on a storage facility operator's network connection decision. A construction cost contribution can, for example, influence the choice of connection point, so that network connection points that are already congested are avoided. A construction cost contribution can also incentivise the use of existing connection points, which would contribute to conserving network connection capacity. The Federal Court of Justice confirmed in its judgment of 15 July 2025 (EnVR 1/24) that a construction cost contribution also has such a steering function in the case of battery storage facilities due to the facilities' dual role as producers and consumers; a contribution may therefore be charged in the same form as for other network connection owners. The potential of storage facilities to relieve the network in no way alters this assessment, since construction cost contributions cannot actually influence usage decisions for storage facilities, but instead aim to reflect the costs of the network connection capacity provided. The point to be discussed is the extent to which other effective locational incentives can also be created.[4] Details of other aspects, including the potential need to change the calculation method for construction cost contributions under the general network tariff system, are set out in the Bundesnetzagentur's points of orientation on network tariff components.

[4] The Bundesnetzagentur stated in its Ruling Chamber 8 position paper of November 2024 that the choice of location could generally be influenced through construction cost contributions.

6. Electrolysers

Electrolysers are used to produce hydrogen and not as electricity storage facilities. From the perspective of the electricity system, electrolysers are always to be classed as “consumers” because they cannot contribute to converting the hydrogen back into electricity on their own. To do this, an electrolyser would have to be coupled with a hydrogen power plant. The Ruling Chamber believes that it would not be sensible to require such coupling for the purposes of the tariff methodology. That would make the already ambitious business case for electrolyser projects even more complicated. A separate assessment of the network tariff rules for electrolysers is therefore necessary.

While (large-scale) battery storage facilities store electricity in the short to medium term, electrolysers can help to store energy in the form of hydrogen over a longer period of time through the conversion from electrical to chemical energy. Such consumption of electrical energy and storage in the form of chemical energy would have a positive effect on the overall system and promote the integration of renewable generation into the electricity market in summer months when electricity generation levels are high or at times when wind levels are high. However, this market signal-oriented behaviour is not always network-beneficial. It may well lead or contribute to congestion in the electricity network.

In the case of electrolysers, the benefit of the behaviour for the network again depends on the combination of location and individual network situation. It would not help an oversupplied distribution network in southern Germany if an electrolyser located in northern Germany increased its withdrawals from the network. Likewise, it would not help network operators if electrolysers located in southerly networks increased their withdrawals when wind generation levels were high. On the contrary, this behaviour could make transport problems even worse.

In view of this, it seems particularly sensible to apply the incentive components in the form of dynamic energy-based prices to electrolysers accordingly. This can ultimately relieve the network and, together with positive and negative prices and sensible location decisions, can even improve the business model for electrolysers. Furthermore, the actual urgent questions about the viability of electrolysers should not guide the decision on the design of the electricity network tariffs.

As mentioned earlier, the conversion back into electricity of the hydrogen that has been produced through electrolysis and stored should not play a role. Whenever and wherever this may be, it is not done by the electrolyser. Moreover, it is completely unclear whether the hydrogen is actually converted back into electricity.

This has two consequences. First, the rules to be set for electrolysers should not depend on the question of electricity being fed back into the network. Second, the netting of the energy-based network tariffs with a financing function as proposed for electrical storage facilities is not possible for electrolysers because there is no potential point of reference for the netting.

As already established for battery storage facilities, the full exemption for electrolysers under section 118(6) sentences 1 and 7 EnWG is no longer tenable in its current form. The point has to be discussed whether it would be justified for network tariffs with a financing function for

electrolysers to differ from the general network tariff system on account of the varying degrees of potential flexibility depending on the electrolysis technology employed. The same also applies to the tariff rules to be set for this user group because of the industrial character of electrolysers as large-scale electricity consumers.

Locational signals can also make sense for electrolysers in order to incentivise network-beneficial location decisions. However, as mentioned above, the method of operation is the more dominant element in terms of benefiting the network. Irrespective of this, it still makes sense to counteract unnecessary demand for capacity through construction cost contributions.

The current exemption for electrolysers under section 118(6) sentence 7 EnWG from the entry tariffs in the gas network to which they are connected is not the subject of the arrangements in the procedure for general electricity network tariffs.

Questions

- Under which conditions do you consider the use of electrolysers to have network-beneficial advantages?
- Which modifications to the general network tariff system could be justified for electrolysers?
- Would it be conceivable, for reasons of non-discrimination between electrical storage facilities and electrolysers, to apply virtual netting of the amounts of electricity withdrawn by electrolysers corresponding to the typical efficiency of the process chain from electrolysis, through storage to conversion back into electricity?