

Renewable and Clean Energy

Tokyo

Client Alert 3 September 2019

For further information please contact



Naoaki ("Nick") Eguchi Partner +81 3 6271 9441 naoaki.eguchi@bakermckenzie.com



Ean MacPherson Partner +81 3 6271 9468 ean.macpherson@bakermckenzie.com



Tsutomu Kobayashi Partner +81 3 6271 9521 tsutomu.kobayashi@bakermckenzie.com



Pierre Chiasson Partner +81 3 6271 9493 pierre.chiasson@bakermckenzie.com

1

Renewable Energy in Japan - Recent Developments No. 47

New Wheeling Charge on JPY 40, 36, 32 and 29 FIT rate Solar Projects, with no adjustment measures.

In a further challenge for renewable energy project developers, a new generation side wheeling charge on solar projects has been proposed by the Ministry of Economy, Trade and Industry ("**METI**").

The proposal has been made by the Advisory Committee for Natural Resources and Energy, Energy Conservation and Renewable Energy Department / Electricity and Gas Unit, Subcommittee on Mass Introduction of Renewable Energy and Next-Generation Electricity Networks of METI (the "**Committee**"), as part of its review of the Feed-in Tariff (the "**FIT**") scheme. That review has included discussions on measures to revise the existing FIT system and to restructure Japanese renewable energy policies.

On 20 August 2019, the Committee published its third Interim report on changes to the Japanese FIT system (the "**FIT Interim Report**")¹, which outlined the Committee's discussion in support of the introduction of the generation side wheeling charge. Unfortunately, the FIT Interim Report proposes no adjustment measures or relief from the wheeling charge for solar FIT projects with JPY 40, 36, 32 or 29 kW/h FIT rates (the "**Early Certified Projects**").

This new charge has its origin in a 27 June 2018 proposal by the chairman of the Electricity and Gas Surveillance Committee to METI, based on an interim working group report that reviewed the allocation of cost burdens to maintain and operate the transmission and distribution network ("Network Cost Interim Report"). The Network Cost Interim Report proposed a new generation side wheeling charge ("Generation Side Wheeling Charge"), that would be levied directly on all types of generation projects (except for residential solar projects smaller than 10 kw) as soon as 2020². However, at that time, it was also suggested that certain adjustment measures should be considered for existing FIT projects to compensate for such additional costs. Unfortunately, METI's current position appears to contradict the previous suggestion for such measures. In this regard, we note that the purpose of the Generation Side Wheeling Charge is to share a portion of the grid cost between electricity end users and generators. As such, this new Generation Side Wheeling Charge differs from the existing Japanese system, under which wheeling charges are generally born by retailers (and then passed on to customers in their electricity bills). Instead, this new Generation Side Wheeling Charge would be imposed on generators, based on the capacity (kW) of their individual power plants. This is intended to

https://www.emsc.meti.go.jp/info/public/news/20180627001.html

https://www.meti.go.jp/shingikai/enecho/denryoku_gas/saisei_kano/20190820_repo rt.html

² Practically it would be around 2022 to 2023 because it takes time to coordinate with the other reforms and to develop systems to charge the costs (see page 21 of the Network Cost Interim report).



Masahiro Tanabe Counsel +81 3 6271 9531 masahiro.tanabe@bakermckenzie.com



Masabumi Tamagawa Senior Associate +81 3 6271 9703 masabumi.tamagawa@bakermckenzie.com



Yuko Watanabe Senior Associate +81 3 6271 9763 yuko.watanabe@bakermckenzie.com

ensure that they bear a certain share of the costs for power grid construction, operation and maintenance.

As a matter of policy, if this new Generation Side Wheeling Charge is levied only on projects that receive approvals from now onwards, developers could assess whether to proceed with such projects based on this charge. However, for owners of FIT projects already in operation, this charge will have a material adverse retrospective effect if it is levied without any adjustment measures.

Based on a rough calculation, taking into account the fixed costs of the basic grid (*kikan keitou*) and ultra high voltage grid (*tokko keitou*) of 10 utilities in Japan, the indicative rate for this charge may be JPY 150/kW per month (or JPY 1,800/kw per year). The Japan Photovoltaic Energy Association ("JPEA") has calculated that, based on average solar panel efficiency, the estimated charge on solar power projects is likely to be approximately 1.3 yen per k/Wh³. This amount has the potential to materially reduce project returns, and to affect the feasibility of projects still in development. Further, it is difficult to predict the future charge amount unless it is intentionally fixed from the beginning.

The new Generation Side Wheeling Charge will be levied on all types of generators (i.e. nuclear, thermal, hydro and FIT), and is intended to spread the burden of constructing, operating and maintaining the transmission system between electricity end users (through retailers) and generators. However, whilst retailers generally have the ability to pass wheeling charges onto their customers, renewable energy project owners that supply electricity under the FIT scheme, will have no similar ability to pass this cost on to their utility customers, due to the FIT PPA structure consisting of a fixed rate tariff, with no scope for increase.

As this new Generation Side Wheeling Charge will have a serious impact on project developers if there is no adjustment measures, we believe it will be critical for the industry to lobby strongly against this treatment.

Adjustment Measures

As a potential measure to avoid such impact, the Committee also examined the need to implement adjustment measures for existing FIT Projects when implementing the Generating Side Wheeling Charge (such as certain compensation payment to some extent). However, in commenting on this issue, one Committee member noted that:

> "....the FIT System has already given particular consideration to the returns for FIT Projects which obtained their FIT approvals during the first three years of the FIT certification period (FIT Projects with JPY 40, 36, 32, or 29 for solar power generation for business)(the "Early Certified Projects"), through granting their FIT rates based on high IRR, however, there may be a much stronger grounds to adopt adjustment measure for FIT Projects other than the Early Certified Projects."

It appears that most of the Committee members agreed with this opinion. Based on this, the Report also states that:

"...in principle, the adjustment measure should be applied to those FIT Projects for which the FIT did not give particular consideration to their profits."

³ This amount can be changed upward or downward because the cost of the grid may change in future.



In practice, this would mean that only lower FIT rate projects (i.e. those projects with an FIT rate below 29 yen kW/h) would enjoy the benefit of the adjustment measure.

While the requirements and the concrete form of the adjustment measures still remain to be discussed by the Procurement Price Calculation Committee this September, there seems to be a high risk that the Generating Side Wheeling Charge may be imposed without adjustment measures for Early Certified Projects, if the Procurement Price Calculation Committee follows this opinion described in the FIT Interim Report.

The above measures may therefore impact strongly on the Japanese renewable energy industry, and developers will need to lobby to ensure that the full adjustment measures also apply equally to the Early Certified Projects.

We believe the grounds on which such objections may be raised would include:

1. Imposing the Generating Side Wheeling Charge on Early Certified Projects without adjustment measures contravenes the FIT system.

Japan's FIT scheme was intended to incentivize the private-sector to invest in new renewable energy projects in Japan. It did this by guaranteeing both the price and PPA term for such projects. The Generating Side Wheeling Charge is contrary to this principle, as it deprives developers of their secured rate of return under the FIT system. This would occur long after most developers have made investments to complete their projects in reliance on the FIT rate of return.

The initial FIT rate of JPY 40 kW/h assumes an IRR for FIT scheme renewable energy projects of 7 to 8% (produced by adding 1 to 2% to the general IRR of 6%). This higher IRR was intended to stimulate private sector renewable energy investment in the initial period of the FIT scheme. However, this initial IRR was based on a number of assumptions, and so investors at the time had to invest without a strong track record in Japan of private sector renewable energy investment. Investors who developed Early Certified Projects therefore took a large commercial risk, and were justified in expecting higher rates of return than those intended by the Japanese government.

Imposing the Generating Side Wheeling Charge now on Early Certified Projects without any adjustment measures, will significantly affect investor's confidence in the stability and predictability of the FIT system. It will damage trust and confidence in Early Certified Projects including on the part of investors, business operators, financial institutions and other stakeholders.

As the Generating Side Wheeling Charge was not included as a cost when calculating the IRR for the initial period FIT rates, the imposition of this charge now will substantially lower investor rates of return under the FIT scheme by 1.3 JPY/kWh. This will deprive investors of the rate of return which the FIT system intends to legally protect, via unjust means.

2. Imposing the Generation Side Wheeling Charge on existing FIT projects without adjustment measures is contrary to the fundamental justification for the Generation Side Wheeling Charge.

The justification for imposing the Generating Side Wheeling Charge on all categories of generators is that it will be accompanied by a reduction in the initial grid connection costs payable by generators prior to grid connection



(the tokutei futan or specific burden). For solar projects, these costs have generally been paid by developers under construction cost allocation agreements (koji futankin), which allocate a portion of the costs to the developer and the remainder to the utility as the utility's general burden (ippan futan). Based on the May 2018 materials from METI's Agency of Natural Resources and Energy ("ANRE"), it was proposed that a higher portion of such grid connection costs would be paid by the utility (which would lessen the initial amount payable by developers), but that developers would then bear the Generating Side Wheeling Charge as a regular recurring payment over the life of their projects. In effect, this was a form of barter trading, where the initial high payment amount became spread over a number of smaller regular payments. For example, ANRE proposed that the initial capped general burden for utilities to construct connection facilities for solar power projects, which was set at JPY 15,000/kW, should be increased to JPY 41,000 to match the amount applicable to the other kinds of generators. As this would result in the utilities paying a higher cost for the initial connection work than before, the initial payment for the developer would therefore be reduced, to compensate them for the Generation Side Wheeling Charge, for projects that receive approval from now onwards.

However, existing Early Certified Projects will have already paid their connection cost amounts in full prior to their COD, and so any reduction in the amount of such payments from now onwards will have no benefit to such projects. Projects that are already in operation will have no chance to take advantage of the reduction of the specific burden. Without any adjustment measures to compensate such projects for having already paid their connection costs in full, imposing the Generating Side Wheeling Charge on the FIT Projects will directly contravene one of the key justifications for introducing the Generating Side Wheeling Charge.

3. An additional charge on FIT scheme power generation projects will damage investor protection and due process.

Since the introduction of the FIT system, investment into FIT power projects in Japan, especially solar power projects, has steadily expanded, with domestic and international energy companies, general business companies, financial institutions, life insurance companies, trust banks, pensions, private funds and individuals, all having increasingly participated in FIT power project investment.

In 2015, the Tokyo Stock Exchange established an infrastructure fund market, on which six renewable energy stocks (*toushi guchi*) are now listed, and which have attracted about 50,000 investors, mainly individuals. Private placement funds for FIT power project investment are also increasing. These listed and privately placed infrastructure funds typically invest in solar power projects that are in operation (rather than projects under development). The introduction of the Generating Side Wheeling Charge for the FIT Projects will cause a decrease in investment yields, and a corresponding fall in the prices of listed infrastructure funds. This will create great uncertainty as to the security of listed renewable energy investments.

This is problematic from the viewpoint of investor protection and due process, because the introduction of the Generating Side Wheeling Charge, which is likely to adversely affect a large number of investors if no adjustment measures are made, (including institutional investors such as pensions funds), has been largely decided by a small number of experts in the Committee and the Procurement Price Calculation Committee.



In this regard, we note the following comments from one Committee member, that:

"....it is necessary to consider the necessity and rationality of adjustment measures based on due process, taking into account certain objective estimates, in order to avoid the impact of retroactive changes for the FIT Projects."

This is clearly stated in the FIT Interim Report, and gives weight to the importance of considering the impact of the new charge on investors.

4. The imposition of the new Generation Side Wheeling Charge without any adjustment measures to the existing FIT projects, risks violating the Energy Charter Treaty.

Article 10, Item 1 of the Energy Charter Treaty provides that:

"...no Contracting Party shall in any way impair by unreasonable or discriminatory measures their management, maintenance, use, enjoyment or disposal. In no case shall such Investments be accorded treatment less favourable than that required by international law, including treaty obligations. "

Treaty member country investors are able to commence arbitration under the Convention if the above Article is breached by a host country.

If an arbitration tribunal finds the imposition of the Generating Side Wheeling Charge on FIT Projects without adjustment measures is not justifiable, then the Japanese Government may be involved in a large number of international arbitration cases and will face claims for large amounts of compensation on the grounds that investor interests have been violated.

Such a risk is clearly shown by Spain's example, which made retrospective changes to its renewable energy electricity regulations in 2010, after which more than 30 international arbitrations were filed against the Spanish government. These claims total more than 7,500 million euros. The Spanish government has already lost five arbitration cases, and is now obliged to pay more than 600 million euros.

According to the Report, imposing the Generation Side Wheeling Charge on the FIT Projects is designed to lessen the national burden, however, if the Government of Japan is required to make large payouts due to investor arbitration, such payments will be paid from taxes, and as a result, the national burden may increase.

Summary

The Generation Side Wheeling Charge will have a material negative impact on both solar project owner returns, and on the perception of Japan as an attractive destination for renewable energy investment. For this reason, we believe it will be important for developers and investors alike to lobby strongly against these new measures.

We will continue to follow this issue closely, and will issue updates once further developments occur.