## Japan's Nuclear Village Wages War on Renewable Energy and the Feed-in Tariff□□日本の原発村、再生可能エネルギーと固定価格 買取り制度に対し戦闘へ

## **Andrew DeWit**

Between 2012 and 2014 we posted a number of articles on contemporary affairs without giving them volume and issue numbers or dates. Often the date can be determined from internal evidence in the article, but sometimes not. We have decided retrospectively to list all of them as Volume 12 Number 30 with a date of 2012 with the understanding that all were published between 2012 and 2014.

## **Andrew DeWit**

The effects of the Fukushima shock continue to spread. Throughout the eventful summer, one of those consequences was the turn away from nuclear power with a dramatic emphasis on renewable power and the feed-in tariff (FIT) to deploy it fast. The FIT policy was championed by former Prime Minister Kan Naoto as well as the CEO of Softbank, Son Masayoshi. They and others in the political, business, non-profit, and academic communities strongly endorsed a legislative bill to expand Japan's handicapped FIT to geothermal, wind, biomass and small hydro. The bill was passed on August of 26 with explicit constraints on the Ministry of Economy Trade and Industry's (METI) capacity to hamstring renewables in favour of nuclear power and on behalf of the nuclear village. Notably, the bill took price setting out of METI's hands. But now METI and its allies in the nuclear village are trying to get that clout back in their hands.

The price-setting mechanism is of signal importance because the role of the FIT is to provide incentives for the adoption of renewable energy. At present most renewable energy produces power that is more expensive than conventional forms of energy, especially coal. The cost of renewable energy is rapidly declining, however, with solar module prices falling by 40% within this year alone. We can see a quickly changing cost profile wherein prices for conventional power are rising while renewable power costs are declining at an accelerating rate. The point of crossover, where a given renewable source's cost drops below the average for conventional power, depends on the speed of these movements. The FIT helps to accelerate renewables' cost reduction by purchasing their currently more expensive power at a guaranteed price and for a guaranteed period of time, with the cost borne by the consumer and the price support ratcheted down with the falling cost of energy production. Thus the FIT gives renewable power producers, such as households, farmers, large and small businesses, local governments, and other actors the pecuniary incentive to install renewable energy power generation.

The minutiae of the pricing function are extremely important because renewables vary greatly in their degree of maturity and hence their respective cost profiles. For example, onshore wind power is a relatively mature renewable power generation source, one whose need for price support is relatively low. By contrast, the per-kilowatt hour cost of solar is still high, and hence solar requires an adequate cost premium to be an attractive target of investment. Also, geothermal costs less per unit of power output than solar but is more expensive than wind. Hence, in order to maximize the production of renewable energy, an appropriate premium needs to be paid to ensure that there is sufficient incentive to invest in a variety of renewable power sources.

The problem with METI's control of the FIT price-setting mechanisms was that it wanted to have a flat and relatively low rate for all renewable energy, excluding solar. The ministry argued that this would keep the cost of the FIT down. METI's position is backed by a number of economists, who are trained to work with largely static, equilibrating quantities, but seem bewildered by the price dynamics of our ongoing and energy-centred industrial revolution. METI did not directly address the criticism that FITs, and especially advanced FITs, used in over 80 countries around the world do not have flat rates for incentivizing renewables. Hence local government leaders and other critics concluded that METI's flatrate approach was aimed at limiting the diffusion of renewable power rather than controlling costs. The critics have a persuasive point: flat and low rates mean among other downsides, that investment will likely flow to the most mature renewable technology at the expense of other options. Since Japan's explicit policy is to expand renewables in the energy mix, it seems unwise as well as odd for the energy bureaucracy to handicap the most effective and efficient policy for achieving that aim.

A 5-member price-setting committee was written into the bill that passed on August 26 and is now in process of becoming a reality. This process has set off a firestorm of controversy. The controversy erupted in the last week of November when it became apparent that the Diet managers were proposing 3 people, a majority, from the nuclear village who are disinclined to support renewables through an advanced FIT. One of these individuals is Shindo Kosei, Executive VP of Nippon Steel and head of Keidanren's Global Environment Division. Japanese renewableenergy supporters present credible evidence that Shindo and his compatriots' backgrounds show them to be major figures in the clique that devised the policies that led to Japan's current very low level of renewables and overreliance on nuclear and other unsustainable power sources. Their suggested appointment to the FIT price-setting council is an indication of how strong the nuclear village remains in Nagatacho and Kasumigaseki, the political and bureaucratic centres of the central government even after support for nuclear power plummeted in public opinion polls. The December 2 Asahi newspaper was sufficiently alarmed by these developments to call on the Democrats and their allies to reconsider the suggested appointments.

When the very large and growing coalition in support of renewables got wind of this move to install three anti-FIT people on the 5-person committee, a powerful wave of opposition was set in motion. About November 28, this wave started from within the Institute for Sustainable Energy Policies and its allied organizations and began traveling rapidly through the social media. The issue was brought up in the mainstream press by midweek and had expanded to the editorial in the mainstream Asahi newspaper by December 2nd. Complementing the editorial major news conferences and other events. A major press conference is slated for December 5 and will be followed up by additional coverage and activism.

It will be interesting, to say the least, to watch how this unfolds. Certainly the government of PM Noda seems to be inclined to favor Tepco and the other monopolized utilities that dominate nuclear power. The nuclear village affords campaign finance and votes at a time of nerve-wracking political and economic instability. And not to support Tepco's efforts to keep renewables at bay raises the uncomfortable political problem of giant utility's business model. Tepco confronts declining revenues and accelerating costs, not least due to compensation and other problems stemming from the Fukushima meltdown. At present these enormous compensation costs have been low-balled to the limit of credibility and shoeboxed into an unstable package composed of government guarantees and other elements.

And Tepco faces other threats. As the November 5 edition of the Economist argued, Tepco should be nationalized in order to resolve this core issue and related urgent matters such as deregulating the power economy. But it would seem that the nuclear village has convinced the Noda regime to exclude deregulation of power from the upcoming (by the end of December) and hastily announced interim report of the all-import METI Advisory Committee for Natural Resources and Energy. Not to nationalize and deregulate this clearly bankrupt firm and parasitized market risks a protracted game of passing hot-potato costs back and forth between Tepco and the state while pretending that they don't exist. All the while, the game detracts from Japan's ability to address its real problems including what to do in the face of mounting difficulties in the international economy. Japan clearly needs a credible growth strategy that emphasizes robust and sustainable domestic demand. While the elite complacently distract themselves playing around in the ruins of the status quo, it is clear that coddling monopolized interests in the power sector will not foster the economy that Japan needs.

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At the same time, this action on price setting appears to be a fight that the nuclear village could not avoid. The threat of a potent FIT in the specific context of Japan is too great, due to the continuing shocks from Fukushima, the increasingly mobilized local interests, and the Schumpeterian "creative destruction" threat from innovative capitalists and the disruptive changes associated with information technology matched with renewables. But the nuclear village's foray appears to have only increased the renewable forces' incentives to work together and forge powerful institutions. Among other things, they are rapidly working towards building a renewable-centred version of Keidanren. So the nuclear village could not avoid its gambit to "occupy" the FIT's pricesetting committee, but in the end they may get kicked out altogether. We'll know soon enough.

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