SIERRA CLUB **IOWA CHAPTER**

Feed-in Tariffs. . . Provide Certainty to All Parties

The Iowa Chapter supports policies to allow feed-in tariffs for homeowners, businesses and farmers who install renewable energy generators such as wind and solar. A feed-in tariff is a contract between the utility company and the owner of the renewable energy generator. The contract includes a rate schedule that lays out how much money per kilowatt hour the utility pays to the renewable energy generator for a set period of time (years) for the purchase of the renewable energy.

This long-term contract can be used in gaining financing for renewable energy projects. Another feature is that the renewable energy generator is paid a fairer price for the energy produced, a price that would fairly represent the capital costs – the amount of money required to purchase the wind turbine or solar panels - and a margin of profit. This price is closer to the price that a utility would pay a commercial owner of renewable energy generators or that the utility would pay for renewable energy generation that they own themselves.

Germany has been successful in small and community-based renewable energy generation technologies, such as wind turbines and solar photovoltaic arrays, throughout the country. Two elements contributed to their success:

- a requirement that distributed renewable energy generation facilities are allowed to connect to the grid
- feed-in tariffs provide a contract with a utility to purchase the power produced by the renewable energy generator at a fair price

Feed-in tariffs allow the small-scale renewable energy projects to compete with the commercial and utility renewable energy projects.

Photo Credit: Lynn Betts, USDA NRCS

Feed-in tariffs are also called clean contracts, renewable energy payments, or renewable tariffs.

Federal law requires utilities to connect small renewable generation facilities to the grid. However Iowa does not require utility companies to offer feed-in tariffs. Consequently most utilities do not offer feed-in tariffs. Currently the purchase price most Iowa utilities offer for the energy the renewable generation facility places on the grid is very low. The compensation is so low that the customers and businesses that want to install small renewable energy projects find that they cannot make a return on their investment that is adequate to pay for initial purchase price. Those prices are significantly lower than utilities are paying commercial large-scale renewable energy generators for the power that is put on the grid. Furthermore most Iowa utilities do not offer a contract that sets the price the utility is going to pay for the power for a set period of time. Without a guaranteed contract, customers and businesses cannot get loans for the purchase and installation of the renewable energy generation equipment.

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Feed-in tariffs can vary between renewable energy sources with different rates paid for solar energy as compared to wind energy. They can also vary by size of the generator.

In order to be profitable, the feed-in tariff needs to cover the capital costs, interest costs, operation and maintenance costs, and profit. With renewable energy, most of the costs are up-front to purchase and install the equipment. When those costs are covered, the numbers of installed small-scale renewable energy generation facilities will significantly grow in Iowa. Although some homeowners and business owners will install renewable energy because "it is the right thing to do", most people will wait until the financial incentives are appropriate to recover costs and a profit.

Reasons for supporting feed-in tariffs

The installation and maintenance of small-scale renewable energy generation creates jobs and builds the local communities in Iowa.

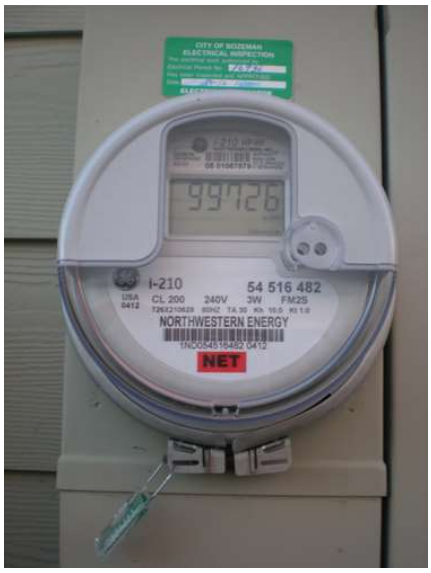


Photo credit: Susan Bilo, National Renewable Energy Laboratory

Renewable energy does not require the purchase of fuel, such as coal, natural gas, or uranium. Iowa does not have sources of coal, natural gas, and uranium and must purchase the fuel from out-of-state companies. With renewable energy, money that would normally be spent on fuel stays in the pockets of Iowans.

The utility company servicing any particular location is a monopoly. There is no free market in the sale of electricity generated by a small renewable energy facility. The owner of the small renewable energy generation facility must sell the electricity to the utility; the owner does not have a choice with respect to where the electricity is sold and to which utility company. Currently utility companies enter into long-term contracts for the purchase of electricity, from both traditional sources and commercial large-scale renewable energy generators. Therefore feed-in tariffs level the playing field between the owner and the utility.

Solar and wind energy do not create air pollution. There is a public interest in increasing the amount of electricity generated from renewable energy sources since renewable energy does not emit pollution like coal-fired power plants and since it does not result in radioactive waste like nuclear power.

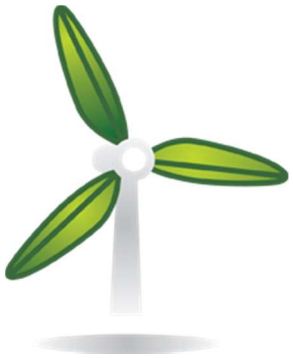
Smaller-scale distributed renewable energy generation diversifies Iowa's energy portfolio to the benefit of the owner of the renewable energy generator. With Iowa's large-scale wind projects, the turbine owners rent land for the turbine and keep the revenue from the sale of the electricity; the landowner does not share the revenue from the turbine. With small-scale projects, the landowner does not have to rent the land for the turbine and gets to keep the revenue from the sale of the electricity, which is financially beneficial to the landowner.

The utility that benefits from the use of the power pays a fair price to the producer of the power.

When tax incentives or grants are given, the taxpayer as a whole is paying for the incentive given to support renewable energy. With feed-in tariffs, the utility benefits from the renewable energy and, thus, pays for that

benefit. The utility benefits include the reduced peak load; especially for solar photovoltaics (the peak load is higher when the sun shines in the summer which is the same time when the solar panels are able to generate the most electricity).

Selling electricity to a utility is like selling any other produce or property on the market. The producer is entitled to a fair and competitive price for the electricity that he produces. For a monopoly utility to take electricity from a small producer at a price substantially lower than the utility pays large wind and solar farm operators or a substantially lower price than the utility pays itself to produce electricity is an environmental injustice.



Other government incentives

Over the years, packages of grants, tax credits for the purchase of renewable energy generation equipment, and production tax credits have been used to encourage homeowners, farmers, and businesses to install renewable energy.

Yet the incentives have not been enough to encourage widespread installation of renewable energy because they have not provided a contract that can be used to obtain loans and because they have not guaranteed a fair purchase price for the power. Furthermore not everyone has been eligible for the grants and tax credits.

In Iowa tax credits have been limited in the amount of money that the state is offering and the credits are offered on a first-come first-served basis. If the tax credits have been fully subscribed, then no more credits can be taken until the next legislature passes more tax credits.

Now that the costs for the purchase of renewable energy generators is declining, particularly solar panels, the government incentives will never keep up with customer demand for incentives.

Farmers Electric Cooperative: A Leader in Offering Feed-in Tariffs

Farmers Electric Cooperative of Kalona was the first rural electric cooperative in Iowa to offer a feed-in tariff. The feed-in tariff was first offered in 2009.

The feed-in tariff is part of a program called Green Power Project. Cooperative members can voluntarily contribute to the Project by committing to pay at least $3.00 a month. The project has three components that support renewable energy:

- The purchase of biodiesel for the cooperative's backup generators.
- The purchase of renewable energy credits which are used to buy power from utility-scale renewable energy sources.
- The support of feed-in tariffs for customer-generated renewable energy.

Policy recommendations

- The Chapter supports state-wide consistent implementation of feed-in tariffs used by all utilities – municipals, investor-owned and rural electric cooperatives – that provides a fair, competitive price for the energy produced for a set period of time. Community renewable energy projects should quality for feed-in-tariffs as well as individual homeowners, businesses and farms.

- The Chapter supports the Iowa Utilities Board monitoring and enforcing the regulations that require utilities to connect a renewable energy source to the grid.

- The Chapter supports the use of homeowner or business owner liability insurance coverage for the renewable energy generation equipment and the elimination of prohibitively expensive liability insurance requirements such as the $1 million dollar coverage requirements of some utility companies.

- The Chapter supports all utilities in Iowa using the standard interconnections the Iowa Utilities Board approved for the investor-owned utilities. Utilities should strive to keep the interconnections simplified and appropriate to ensure safety and satisfactory installation.

- The Chapter supports policies allowing a homeowner, business or government entity to rent their building rooftop or land to a third party for use to install solar panels or wind turbines.

Resources

For information on feed-in tariffs, see http://www.wind-works.org/articles/feed_laws.html

Karlynn Cory, Toby Couture, and Claire Kreycik, Feed-in Tariff Policy: Design, Implementation, and RPS Policy Interactions, National Renewable Energy Laboratory, March, 2009

The National Association of Rural Electric Cooperatives is opposed to feed-in tariffs. The report detailing their opposition is "Feed-in Tariffs, an issue paper of the National Rural Electric Cooperative Association". It can be found at http://www.nreca.coop/wp-content/uploads/2013/07/FeedInTariffs_WhitePaper.pdf

Information on Farmers Electric Cooperative Green Power Project can be found at https://sites.google.com/site/feckalona/energy/greenpower

Farmers Electric Cooperative Electric Tariff, Section 29.2 Experimental Consumer Renewable Energy Sales, January 1, 2011