

Changes in the Unlicensed Electricity Generation Regime in Turkey

Vedat Akdağ

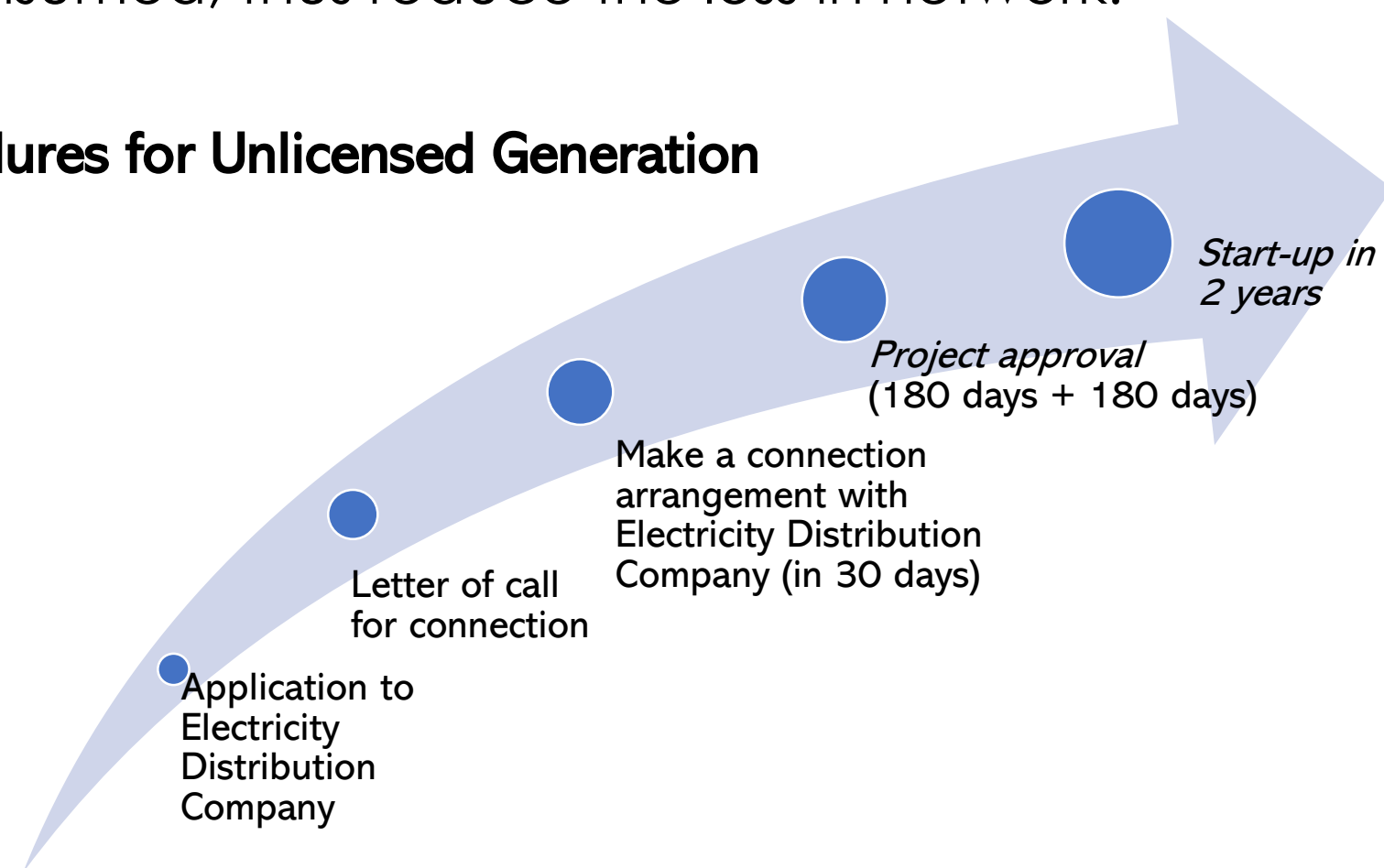
Energy Market Regulatory Authority of Turkey



Background

- Unlicensed (mostly solar and connected to the distribution network) power generation has been made possible for interested parties in Turkey since 2010. Considering the electricity market reform in Turkey which started in 2001, unlicensed electricity production is a new activity in the market that allows consumers to generate electricity without licensing (i.e. less bureaucracy).
- The main purpose of this regulation is, among other things, to provide the entrance of the small power plants to the electricity market, generate the electrical energy where it is consumed, thus reduce the loss in network.

Procedures for Unlicensed Generation



New Regulation Concept

- The new Regulation on Unlicensed Electricity Generation in the Electricity Market has entered into force upon its publication in the Official Gazette on 12 May 2019.
- The new Regulation reflects a policy preference towards selfconsumption rather than electricity trading purposes for unlicensed generation investments.
- The new Regulation allows all individuals and companies to establish solar-based production facilities with roofing as much as their own consumption.
- The monthly settlement method regarding the purchase of surplus electricity, which has been awaited for some time now by the solar sector, has been regulated under the new Regulation.
- The maximum installed capacity limit for generation facilities based on renewable energy resources that are exempt from the obligation to obtain an electricity generation license and are not required to be owned by a legal entity has been increased from 1MW to 5MW for those that receive a call letter from distribution companies after 12 May 2019.

Development of the unlicensed installed capacity

Distribution of Unlicensed Installed Capacity by Sources (MW-%)

Resource Type	2017		2018	
	Installed Capacity (MWe)	Share (%)	Installed Capacity (MWe)	Share (%)
Solar (Photovoltaic)	2.978,84	93,87	5.016,99	94,47
Natural Gas	85,88	2,71	153,04	2,88
Biomass	66,72	2,10	79,18	1,49
Wind	32,20	1,01	51,95	0,98
Hydraulic	8,69	0,27	8,91	0,17
Solar (Concentrated)	1,00	0,03	0,50	0,01
Total	3.173,32	100,00	5.310,57	100,00

- The principles and conditions of unlicensed power generation have been regulated by the Regulation on Unlicensed Electricity Generation in the Electricity Market since 2013. There have been an increasing demand to install unlicensed RES generators, mostly solar power plants, all over the country. But the most investors was interested in selling the surplus of electricity generated (i.e. other than consumption) and earning certain revenue.
- In 2018, installed capacity for unlicensed generation reached to 5.310,57 MW increasing by 67,35 % compared to previous year. 94,47% of this amount was obtained from solar (photovoltaic) energy.

Distribution of the Amount of Payment Made Within the Scope of Unlicensed Electricity Generation by Sources (TL-%)

Resource Type	2017		2018		Change (%) 2017→2018
	The amount of payment made for the purchased surplus energy (TL)	Share (%)	The amount of payment made for the purchased surplus energy (TL)	Share (%)	
Solar	1.394.788.180,86	94,12	5.161.639.212,83	96,48	270,07
Biomass	71.776.216,62	4,84	134.929.718,77	2,52	87,99
Wind	10.038.095,17	0,68	41.487.589,52	0,78	313,30
Hydro	5.259.414,79	0,35	12.131.327,19	0,23	130,66
Grand Total	1.481.861.907,44	100,00	5.350.187.848,31	100,00	261,04

Main Conclusions

- There is a high demand from investors for unlicensed electricity generation in Turkey. Solar generation leads in terms of applications.
- The main difficulties are the selection of plant locations and coordination among relevant authorities. Moreover, an awareness campaign would help people to better understand the related regulation and applications.
- Financing needs for unlicensed generation is an important issue that policy makers need to pay special attention to, because facilitating financing will contribute to the further development of the electricity market.

Reference Materials

- Turkish Electricity Transmission Company (TEİAŞ): <https://www.teias.gov.tr/en>
- Energy Market Regulatory Authority (EPDK): <https://www.epdk.org.tr/Home/En>

Keywords

Unlicensed Electricity Generation, Regulation, Renewable Energy, Solar Rooftop

In case of interest, please contact:
vakdag@epdk.org.tr