

Electric **Animal** Fence Energizer – Guidelines

1.	ISI mark is mandatory for Electric Fence Energizer.
2.	Electric Fence installation should conform to IS 302 – 2-76/1999 and IS 60335 – 2 - 76 / 2002.
3.	The formal application along with the completion report from the B grade contractor along with an inspection fee of Rs. 2,760/- and should be submitted to the Electrical Inspector.
4.	Erection and maintenance of the Fence shall be carried out under the supervision of the B grade Supervisor.
5.	If the fence is crossing public/private property, sanction/NOC from appropriate agency should be submitted.
6.	<p>The following technical parameters should be required for the impulse generator for the safe operation of it.</p> <p>(I) The impulse repetition rate shall not exceed 1 Hz.</p> <p>(ii) The output voltage of the energizer shall not exceed 10kV.</p> <p>(iii) The impulse duration of the impulse in the 500Ohm component of standard load does not exceed 0.1 second.</p> <p>(iv) The energy per impulse in the 500Ohm component of the standard load shall not exceed 5 joules.</p> <p>(v) Mains operated or solar powered and battery operated energizers suitable for connection to the main shall be class II with respect to protection against electric shock.</p> <p>(vi) Energizer shall be of minimum of protection IPX4 for outdoor installation.</p>
7.	Electric fence construction such as barbed or razor wire which is likely to load the entanglement of animal or persons shall be avoided.
8.	Fences shall not be supplied from two separate energizer or from independent fence currents of the same energizer. If the separate fences are supplied from separate energizer, the distance between the wires of electric fences shall be minimum 2 metre. If the distance is to be less, it shall be effected by means of electrically non conductive materials or with an isolated metal barrier.
9.	If the energizer is provided with more than one fence circuit the impulse for individual sets of output terminals shall be synchronized. The duration and repetition

	of impulse shall be the same as per the energizer with one circuit.
10.	The energizer shall be earthed independently and a minimum distance of 10 meter shall be maintained between energizer earth electrodes and any other earthing system.
11.	Connecting leads by the energizer draw on inside the building shall be effectively insulated from the earthed structural part of building and if it is run underground the HV grade cable should be drawn through PVC conduit. Care must be taken to avoid the damage of the insulation caused by effort of animals or tools.
12.	Energizer live wire shall be drawn separately from other power or communication lines.
13.	The connecting leads and the fence wires shall not cross OH lines/communication lines. If such crossing can not be avoided, in such case only connecting leads can be taken under ground through PVC conductor with proper insulation.
14.	<p>The minimum clearances shall be maintained for connecting leads/ electric fence wires which are installed near the OH lines.</p> <p>Voltage : less than or equal to 1000V - 3m</p> <p>Voltage: 1000 V to 33kV - 4m</p> <p>Voltage: greater than or equal to 33kV - 5m</p>
15.	Height of electric fence above ground shall not exceed 3 meters from either side of power line for a distance of 2m for voltage upto 1000V and 15metre for a voltage exceeding 1000V.
16.	Where ever the electric fence crossing a pathway or adjacent to the pathway, warning sign shall be exhibited at adjacent electrified wires. Warning board shall be placed less than 50 metre interval of fences where there is public access.
17.	The conducting wires of fences shall be made non corrosive material. The joints in the wire shall be made either by knotting or double crimp sleeve joiner.
18.	A cut off switch of adequate rating and voltage level of 10k shall be used to isolate the different sections of the fences without turning off the energizer.
19.	In dry terrain areas with low rain records, have a low conductivity through the ground, in such place ground wire return system of earthing shall be adopted.
20.	Electric security fences used for security purpose shall consist of an electric fence and physical barrier not less than 1.5m in height so as to avoid inadvertent contact with the pulsed conductors of the fence.

21.	Depending on the type of connection, the mains operated/battery operated fence energisers are classified as Type A, B, C & D. the battery charger shall be connected to the mains and used to charge battery. this should not be connected to the energiser directly. the solar PV modules and its circuits for charging the batteries are also like the above. During charging the lead acid batteries should be placed in well ventilated area. the energiser shall be marked with rated voltage or voltage range for battery supply. Battery operated energiser should be marked with warning instructions. "Do not connected to the main operated equipment."
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Testing of Impulse Generator

1. Impulse generator/Fence Energiser should tested and got sealed from the Lab associated with our department where this testing facility is available. Testing is mandatory as per SO. 4958(E) dated 14.11.2024 from Ministry of Commerce & Industry, Govt of India. CRO testing facility is only available in the lab, so first testing of the energiser is to be done in the lab.
2. A sticker and notice showing that 'the issued safety certificate will be void, if the seal is tamped' to be affixed after testing the unit.
3. The safety certificate issued by the Electrical Inspector is valid for two years. Before one month of lapse of the certificate, the applicant should submit the application with requisite inspection fee and single line diagram, route map to the electrical inspector. Also, it is the owner's responsibility to re-apply and obtain a new safety certificate upon expiration.

Sl. No.	Item	Fee	Head of Account
1.	Inspection fee (Existing)	Rs. 2,760/-	0043-00-102-99
2.	Testing of Energiser Unit	Rs. 1,000/-	0043-800-98
3.	Inspection fee (Revised)	Rs. 2,760/-	0043-00-102-99

Application to erect Power Fence

1.	Name of the Applicant	:	
2.	Father's Name	:	
3.	Age	:	
4.	Address	:	
5.	Survey no. of the property	:	
6.	Location/site of the property	:	
7.	Type of Property (Agricultural field / House / Others	:	
8.	Types of animals visiting the	:	

	property		
9.	Reason for fencing	:	
10.	Extent of property proposed for fencing	:	
11.	The mode of supply to fencing (TANGEDCO/Solar/Other	:	
12.	Specification of electric fencing proposed a. Voltage b. Current c. Safety tripping devices d. Earthing	:	

Enclosure :

1. Completion report from the Contractor.
2. Inspection fee original receipt.
3. Single line diagram and route map.
4. Lab test report.

Signature of the Applicant