



ABSTRACT

Forests – Wildlife – Tamil Nadu Power Fences (Registration and Regulation) Rules, 2023 – Notified under sub-section (1) of section 64 of the Wildlife (Protection) Act, 1972 (Central Act 53 of 1972).

Environment, Climate Change and Forests (FR.5) Department

G.O.(Ms).No.104

Dated: 03.07.2023

சோபகிருது, ஆணி - 18

திருவள்ளூர் ஆண்டு - 2054

Read :

1. Orders from the Hon'ble High Court, Madras in W.M.P.(MD).No.13531/22 in W.P.(MD).No. 19771/ 18 dated 27.01.2023.
2. From the Principal Chief Conservator of Forests and Chief Wildlife Warden letter No. WL1/2567/2023, dated 09.05.2023 and 22.06.2023.

ORDER :

In its order first read above the Hon'ble High Court of Madras in WMP (MD) No.13531/2022 in W.P.(MD) No.19771/2018 filed by Thiru Manoj Immaunel relating to issue / frame rules guidelines, policy relating to erection of solar electric fence installed inside and nearby the private and Government lands of the forest areas of Tamil Nadu, has ordered as follows :-

"Learned Additional Advocate General submitted that with regard to framing of Rules and Guidelines, the Government has framed a draft guidelines in the name of "The Tamil Nadu Solar and Power Fences (Registration and Regulation) Rules 2022", and the same is communicated to various line departments for offering comments. The draft rules also placed before us. On seeing the same, we are of the view that technical specification and methodology has to be included in the Rules, particularly, with regard to the voltage and intermittent power supply".

2. Adverting to above and based on the proposal of Principal Chief Conservator of Forests and Chief Wildlife Warden in the letter second read above, the Government after careful examination, decided to notify the Tamil Nadu Power Fences (Registration and Regulation) Rules, 2023 under sub-section (1) of section 64 of the Wildlife (Protection) Act, 1972 (Central Act 53 of 1972). Accordingly, the notification appended to this order will be published both in English and Tamil in the Tamil Nadu Government Gazette and in Tamil in the District Gazette of the concerned District.

3. The Works Manager, Government Central Press, Chennai is requested to send 25 copies of each of the Notification to Government, the Principal Chief Conservator of Forests, the Principal Chief Conservator of Forests and Chief Wildlife Warden and the Collectors of concerned Districts as soon as the notification is published.

4. The Tamil Development and Information Department is requested to send immediately a Tamil translation of the Notification to the Works Manager, Government Central Press, Chennai for publication in the Tamil Nadu Government Gazette and in the District Gazette of concerned Districts.

(BY ORDER OF THE GOVERNOR)

SUPRIYA SAHU
ADDITIONAL CHIEF SECRETARY TO GOVERNMENT

To

The Works Manager,
Government Central Press, Chennai-1. (w.e)
The Principal Chief Conservator of Forests
(Head of Forest Force), Chennai-32.
The Principal Chief Conservator of Forests and
Chief Wildlife Warden, Chennai-32.
The Private Secretary to Principal Secretary to Government,
Energy Department, Chennai-9.
The Private Secretary to Agricultural Production Commissioner and Secretary,
Agriculture and Farmers Welfare Department, Chennai-9.
The concerned District Collectors.
The Chairman cum Managing Director,
TANGEDCO, Chennai-02.
The concerned District Forest Officers.

Copy to:-

The Special Personal Assistant to Hon'ble Chief Minister,
Chief Minister Office, Chennai-9.
The Special Personal Assistant to Hon'ble Minister
(Agriculture and Farmers Welfare), Chennai-9.
The Special Personal Assistant to Hon'ble Minister (Finance & HRM), Chennai-9.
The Special Personal Assistant to Hon'ble Minister (Forests), Chennai-9.
The Private Secretary to Secretary, Law (Legislation), Chennai-9.
The Private Secretary to Additional Chief Secretary to Government,
Environment, Climate Change and Forest Department, Chennai – 9.
The Tamil Development and Information Department, Chennai – 9.
SF/SCs.

//FORWARDED BY ORDER//

P. Sahu
3.7.23
SECTION OFFICER
3.7.23

APPENDIX
NOTIFICATION

In exercise of the powers conferred by sub-section (1) of section 64 of the Wildlife (Protection) Act, 1972 (Central Act 53 of 1972), the Governor of Tamil Nadu hereby makes the following rules, namely:-

RULES

1. Short title and Commencement.— These rules may be called the Tamil Nadu Power Fences (Registration and Regulation) Rules, 2023.

2. Definitions. — In these rules, unless the context otherwise requires,-

- (a) "District Forest Officer" means the District Forest Officer or Wildlife Warden or Deputy Director of Tiger Reserve or Divisional Forest Officer;
- (b) "Form" means a Form appended to these rules;
- (c) "Owner" means a person who owns any property or is in possession or management of any property;
- (d) "power" includes solar powered or battery operated system;
- (e) "power fence" means fence through which electric current is passed, to give electric shock to any person or animal who touches it;
- (f) "property" means any immoveable property including land or building;
- (g) "Schedule" means a Schedule appended to these rules;
- (h) "Company" means any organization, which manufactures or sells power fences or ancillary equipments;
- (i) Words and expressions used and not defined in these rules but defined in the Wild Life (Protection) Act, 1972 (Central Act 53 of 1972) shall have the same meaning respectively assigned to them in the Act.

3. Application for permission to erect power fence and for Certificate of Registration.— (1) No person shall erect a power fence, within 5 Kilo meters from a Reserve Forest boundary, in or around his property without getting permission from the District Forest Officer.

(2) Every application for permission to erect a power fence shall be made by the owner in Form-I to the District Forest Officer.

(3) The District Forest Officer, on receipt of an application in Form-I shall cause inspection of the property along with an Officer, not below the rank of Assistant Divisional Engineer of the Tamil Nadu Electricity Board and may grant permission in Form-II, to erect a power fence for the entire extent or to a lesser extent, depending on the nature of topography of that area and animal trails, subject to the condition that the power fence should be in conformity with the specifications mentioned in the Schedule or reject the application, recording the reason therefor:

Provided that no application shall be rejected or no applicant shall be granted permission to erect power fence for lesser extent, unless the applicant has been given a reasonable opportunity of being heard.

(4) On grant of permission under sub-rule (3), the owner shall erect a power fence and apply for registration of the power fence in Form-III along with an

Undertaking in Form-IV and a copy of the permission, within ninety days from the date of grant of the permission.

(5) On being satisfied that the power fence has been erected as per the specifications mentioned in the Schedule, the District Forest Officer shall issue a Certificate of Registration in Form-V. Otherwise, the District Forest Officer may direct the owner to rectify the defects and to make a fresh application for erection under sub-rule (4).

(6) An order under sub-rule (3) or sub-rule (5) shall be passed by the District Forest Officer within a period of not more than 45 days from the date of receipt of application.

4. Appeal.- Any person aggrieved by an order of the District Forest Officer under sub-rule (3) of rule 3 may prefer an appeal to the Conservator of Forests having territorial jurisdiction, within thirty days from the date of receipt of the order.

5. Application for Certificate of Registration for existing power fences.—

(1) Every owner who has a power fence erected on his property on the date of coming into force of these rules, shall within sixty days from that date, after ensuring that the power fence has been erected as per the specifications mentioned in the Schedule, apply in Form-III to the District Forest Officer for registration of the power fence along with an Undertaking in Form-IV.

(2) On receipt of an application under sub-rule (1), the District Forest Officer shall cause inspection of the property along with an Officer not below the rank of Assistant Divisional Engineer of the Tamil Nadu Electricity Board and on being satisfied that the power fence has been erected as per the specifications mentioned in the Schedule, issue a Certificate of Registration in Form-V. Otherwise, the District Forest Officer may direct the owner to rectify the defects and to make a fresh application for erection under sub-rule (1).

(3) An order under this rule shall be passed by the District Forest Officer within a period of not more than 45 days from the date of receipt of the application.

6. Validity and renewal of Certificate of Registration.— (1) A Certificate of Registration shall be valid for a period of three years.

(2) An application for renewal of Certificate of Registration shall be made to the District Forest Officer three months before the date of expiry. The provisions contained in rule 5 shall, *mutatis-mutandis*, apply for renewal of Certificate of Registration.

7. Periodical Inspection.— The Forest Range Officer and the Foreman of the Tamil Nadu Electricity Board of the area concerned shall conduct joint inspection of the properties, wherein power fences have been erected, once in a fortnight and maintain a log book for such inspection.

THE SCHEDULE.

(See rules 3 and 5)

TECHNICAL SPECIFICATIONS FOR ELECTRIC FENCE ENERGIZERS

A. Solar photovoltaic Module

Type – Mono crystalline / Poly crystalline IEC 6215 Certified modules to be used.
Peak Power output should be 100 Watts /12 V.

B. ENERGIZER - The energizer used should have certification of BIS-302-2-76 (India) or IEC 60335 or EN60335 (International) Markings with Serial number.

The Test certificate should contain the test results confirming that the unit's output matches the specification given below:

- (1) Energizer outer cover shall have IP 54 Protection.
- (2) The energizer should be powered by battery not exceeding 12 volts DC.
- (3) Peak output voltage should not exceed 10KV.
- (4) Root Mean Square current of the fence should not be beyond 10 Amps.
- (5) Pulse interval in the fence should be in between 1-1.5 seconds.
- (6) Duration of impulse should not exceed 0.1 seconds.
- (7) Maximum energy discharge per impulse measured at a resistance of 500 Ohms – 5 Joules.

The user shall not install a fence energizer that receives its energy only from an electric supply system.

C. BATTERY:

- (1) Battery type should be low maintenance tubular battery.
- (2) Battery should have capacity of 12V/100AH.
- (3) Battery should be charged by solar power with a proper Charge controller to regulate the charge delivered to the battery and the energizer. If the location does not support solar energy, then a battery charger with an isolation transformer could be used.
- (4) The energizer should be disconnected from the mains while charging the battery. Energizers should not be connected to a mains DC supply unit under any circumstance.
- (5) In case of the absence of solar power, use of AC current to charge the 12V battery should require the approval of the electricity department. AC charged energizers with BIS/IEC/EN Marking, may be permitted with the approval of Tamil Nadu Generation and Distribution Corporation Limited (TANGEDCO).

D. Fence Alarm

It must be an external horn.

E. Module Mounting structure type

It shall be Hot dip galvanized GI Pole.

F. Housing box for housing energizer and battery

It must be Zinc sheet box with locking facility.

G. Fence Wire

- (1) It shall be minimum of 12 SWG high tensile hot dip galvanized high carbon ACSR cable.

- (2) Hanging Type should be 14 SWG GI (or) Stainless Steel hot dip galvanized Aluminium Conductor Steel Reinforced spring winding cable (10 feet hanging).
- (3) The distance between the fence wire in hanging type (For Elephants) shall not be less than 1.5 ft.
- (4) Tying Wire Material must be 14 SWG GI Wire with high quality zinc coating.

H. Reel Insulator

Material must be Virgin Poly Propylene or Poly Carbonate UV treated (test certificate for the material tested for insulators to be furnished from an Government authorized laboratories like CIPET India).

I. Strain Insulator

It must be Virgin Poly Propylene (or) Poly Carbonate UV treated and capable of with standing up to 15 KV (test certificate for the material tested for insulators to be furnished from a Government authorized laboratories like CIPET India).

J. Permanent wire tightener

It must be made of aluminum alloy and should withstand 15KV and should be corrosion resistant.

K. Joint Clamp

It must be MS washer GI coated.

L. Intermediate Post

- (1) It must be Hot dip galvanized "T" angle 25mm X 25mm X 3mm and erected at every 6 metres. The post should meet ISI standards.
- (2) The AED Specification for all animals including elephant - the height should be 2.0 feet BGL +8.0 FEET AGL +2.0 feet Projection = 12.0 feet and the warranty of 10 years to be provided.
- (3) The AED Specification for all animals except elephant - the height should be 1.5 feet BGL +6.0 FEET AGL = 7.5 feet.

M. Cornor Post

- (1) It must be GI Class B 2" pipe with prepunched holed to facilitate wire. The AED Specification for all animals including elephant -the post should meet ISI standards and Height should be 2.5 feet BGL +8.0 FEET AGL +2.0 feet Projection = 12.5 feet.
- (2) The AED Specification for all animals except elephant - the post should meet ISI standards and Height should be 2.5 feet BGL +6.0 FEET AGL = 8.0 feet.

N. Support Pipe

- (1) The AED Specification for all animals including elephant - It should be GI Class B, 1.1/4" Pipe should meet out ISI standards and the length should be 8.0 feet.
- (2) The AED Specification for all animals except elephant - It should be GI Class B, 1.1/4" Pipe should meet out ISI standards and the length should be 6.75 feet.

O. Lead out cable type

It should be Double insulated cable hot dip galvanized and should withstand upto 15KV.

P. Permanent tension spring

It should be GI coated 6mm coil spring.

Q. Earthing Arrangements

- (1) It should be with 4ft long non rusting SS 8mm rod with special earth for retention of moisture for long period. Minimum 5 numbers of earthing stainless steel electrodes enclosed in a cloth bag with non corrosive electrolyte for energizer 3 nos. for unit earthing, and 2 nos. for lightning diverter.
- (2) Earth line near the other domestic earth lines shall not be fixed.
- (3) At least 2 metre distance should be from the other earthing from the earthing of Electric fence.

R. Neon Tester

The five highly visible neon indicator lights should approximate readings as mentioned below:-

Excellent	Five lights	5000 V
Good	Four lights	3800 to 5000V
Fair	Three lights	2500 to 3800 V
Poor	Two lights	1800 to 2500 V
Very poor	One light	1000 to 1800 V

S. Lightning diverter kit

It should be GI coated diverter kit with minimum 2 earthing pipe.

T. Gate Handle

It must be Poly propylene gate handle with proper insulation

U. Name Board

Proper name board shall be kept with optimum letter size in green colour with yellow background of size 1.5 X 1.5 feet (plastic board) indicating the farmers name, scheme name, company and department name.

V. Framed Power Gate

It must be 5.5 feet height must be 16 feet double framed power gate fabricated with 40 mm square MS pipe around with 100 mm square pillar MS Pipe.

W. Tool Kit

It must be Wire tightener handle, twisting tools, pliers and double ended spanner for clamp tightening should be provided.

X. Civil Works

The required Civil Works for the erection of corner post, support pipe and gate stand with concrete mixture (1:2:4) should be undertaken by the installing firms.

Y. Monitoring Equipment

Fence live light and GSM based Monitoring system or Digital Volt Meter Must display fence voltage digitally up to 15KV, Made of non-shocking plastic.

Z. General Guidelines

- (1) The user shall not erect fence passing along a electric line (EB line). There should be 6 metre between the top of the fence and the main line.
- (2) A fence should be installed to be as minimally intrusive as possible.
- (3) Fence live light shall be provided in all corners of field, where fencing unit is installed.
- (4) Concertina or barbed wire shall not be attached to the fence, wall, any existing barbed wire, concertina, or similar wiring mechanisms installed on the structures shall be removed.
- (5) Electricity Fences shall be installed or constructed by the provisions of the International Electro Technical Commission (IEC 60335), Bureau of Indian standard (IS302-2-76).
- (6) Warning signs.- Warning sign Boards should be UV stabilized polyethylene plastic with statutory colour and signs. Fences shall be appropriately identified with the warning signs stating "Warning: Electric fence." In addition, the warning signs must include universal symbols indicating the presence of the fence. A person must install warning signs at each gate or accessing point at the perimeter fencing. Their intervals should not exceed 30 feet. The warning signs should be visible on both fencing sides and shall not be smaller than 12 inches x 18 inches. A person should keep the sign in good condition to ensure readability and visibility and be quickly identified.
- (7) Emergency access.- For emergency access, Automatic shut off provision, disconnect switches, and other similar devices should be installed.

SUPRIYA SAHU
ADDITIONAL CHIEF SECRETARY TO GOVERNMENT

// True Copy //

P. Sahu
3.7.23
SECTION OFFICER

3.7.23

FORM-I

(See sub-rules (2) and (3) of rule 3)

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	:	

Place:

Date :

Signature of the Applicant

FORM-II

(See rule 3(3))

Permission granted to erect Power Fence.

Permission Number

Date

Thiru/Thirumati/Selvi _____ son/wife/daughter of _____ residing at _____ is hereby granted permission to erect a power fence in the property situated in _____ for the extent of _____.

2. You are directed to erect and apply for registration of the power fence within 90 days as per the Tamil Nadu Power Fences (Registration and Regulation) Rules, 2023.

Place:

Date :

Signature of the District Forest Officer

Date

Seal

FORM-III

(See rules 3(4) and 5(1))

Application to register Power Fence.

1. Name of the Applicant :
2. Father's name :
3. Age :
4. Address :
5. Village and 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 fenced :
11. Specifications of the energizer used,--
 - a) Supply used (Solar / TANGEDCO/ any other)
 - b) Voltage /Current rating
 - c) Details of the Safety device fixed details
12. Type of fence hanging / regular :
13. Details of *permission granted in Form-II, for erection of power fence (if applicable) :

If not, the date from which the existing power fence has been erected. :

Place :

Date :

Signature of the Applicant

* Copy of Permission granted to be enclosed.

FORM-IV

(See rules 3(4) and 5(1))

Undertaking

I Thiru / Tmt. _____, S/o (D/o) _____, Age ___ years, _____ village / town, _____ Taluk, _____ District, _____ State hereby undertake on behalf of M/s. (Company name and Address) _____ that we had installed the power fence on property (Survey No) _____ as per the technical specifications mentioned in the Schedule to the Tamil Nadu Power Fences (Registration and Regulation) Rules, 2023.

Place :

Dated :

(Signature of the representative of the Company along with Seal and date)

FORM-V

(See rules 3(5) and 5(2))

Certificate of Registration for Power Fence.

Registration Number

Date

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 (with geo coordinates) :
7. Type of Property (Agricultural field / House / Others) :
8. Types of animals in the vicinity of the property :
9. Reason for fencing :
10. Extent of property permitted to be fenced :
11. Specifications of energizer permitted :
 - a) Supply used (Solar/ TANGEDCO/Another)
 - b) Voltage / Current rating
 - c) Safety device fixed details
12. Period for which permission is granted :

Place :

Dated :

Signature of the District Forest Officer

Date

Seal

SUPRIYA SAHU
ADDITIONAL CHIEF SECRETARY TO GOVERNMENT

// True Copy //

P. Sahu
3.7.23
SECTION OFFICER
467
3.7.23

