

*GOVERNMENT OF MEGHALAYA  
INSPECTORATE OF ELECTRICITY : : SHILLONG  
BIJOLIONI NALJOKANINA MIKRAKATANI*

A'songni dal'roroani ba silroroaniara bijolio pangchaka. Bijoliara sakantini salantini janggi tangani jekai office, school, college, industries, etc.-rango mongsongbatgipa nangani ong'a. Meghalaya a'doko mande jelrorobatanichi nokrang, factory-rang, ba building-rangko rikani barienba bijoliko jakkalgiparangba batroroenga. Manderangni nangnikanirangko chu'sokatna gita Electric Transmission aro Distribution line-rang Meghalaya a'doko bariroroengaha. Indiba ru'utgija bilsirango mande aro matburunrangni bijoli nange a'sel ong'anirangba baribatroroengaha. Inspectorate of Electricity office, jean bijolini niamrangko ra'gata aro nirokachim, indakgipa mande aro matburunrangni bijoli baksa a'sel ong'anirangko komibatgipa gadangona tang'onako nangnika.

Bijoliko mikronchi nikna man'jani gimin bijolide dongja ine ong'ja, indiba uko dangtap man'ode kenbeani ong'a. Bijoli nange a'sel ong'aniko komiatanian Sorkari-ni mongsonggipa miksongani ba nangnikani ong'a aro iako bijoli nange a'sel ong'gnirang aro uarangko champenganirangko manderangna mikrakataniko on'anichi chu'sokatna man'a. Meghalaya a'doko bijoli nange a'sel ong'anirangko komiatna gita manderangni bijolioniko naljokani gimin u'iani aro ma'sie ra'aniko nanga.

Bijolioni naljokani gimin u'ie ra'anian mandeni salantini janggi tanganio nangchongmotgipa u'ie ra'ani ong'a. Bijoli nange a'sel ong'aniara manderangni bijolini gimin u'igijani aro simsakgijani a'sel ong'a.

Bijolioni naljokani gimin u'ie ra'na gita, dakna nanggni aro dakna nanggijanirangni gimin u'ie ra'chengna nanga. Bijoli nange a'sel ong'aniara minggni dake ong'a, jekai:

1. Sianiona sokatgipa (Fatal)
2. Saknaa man'ani (Non-fatal)

Uandake mande aro matburunrangko bijoli nange saknaataniara ka'mao janapgiminrang gita ong'a:

1. Bijoli nange saknaa (Fatal) – voltage-o pangchake dikdiksani gisepon sianiona sokatnaba donga
2. Bijoli nange saknaa (Non-fatal) – nachil nagok ong'ani, mikron kana ong'ani, gisik ra'atgijani, tuna man'gijanirangko ong'atnaba donga
3. Bijoli nange kamani- jak kora, ja'a kora, jaksi kora, ja'a aro jak kora ong'atnaba donga, mikkang aro be'enko ong'siatnaba donga
4. Bijoli nange ga'akani (Fatal/Non-fatal)

Bijolichi a'sel ong'aniara direct nangani ba direct nanggija sepango donganichiba ong'na man'a. Voltage agre bilakode conductor-oni adita sepange dongoba current salna man'aia. Bijoli nange a'sel ong'aniara altuen ong'na man'a, uni gimin bijolio naljokani gimin u'ie ra'na nanga. Uni gimin pilak manderangni naljokanina bijoliko simsake jakkalani gimin mikrakataniara namen mongsongbatgipa ong'a.

Inspectorate of Electricity office-ni miksongani ba nangnikaniara Meghalaya-ko bijoli nange a'sel grigipa a'dok ong'atanian ong'a. Un baksana, Inspectorate of Electricity office-ni miksonganiara Electricity Act, 2003, ni niamrangni gita section 53-o janapgimin gita bijolini bosturangko naljoke rakkianiba ong'a.

Ka'mao janapgiminrangan bijoli nange a'sel ong'aoniko naljoke rakkina gita dakna nanggni aro nanggijanirang ong'a:

#### **Dakna nanggijanirang:**

- Bijolini pole ba post-o nokrangko riknabe, maina iachi nokni manderangna saknaani ba sianiko ra'bagen
- Mamung nokkoba bijoli line-ni ka'mao rikna nangja
- Mamung building ba flood bank-rangko bijoli line-ni sepango rike a'ako chuatna nangja. Nangchotmotode Electrical Inspector-chi re'ange agangrikna nanga
- Nokko wiring ka'on quality namgijagipa PVC, switch, MCB, etc. rangko jakkalna nangja maina iarang noko electric spark ong'ate wa'al kamaona sokatgen
- Na'tok rim'ani milsi kurako electric/bijoli line sepango ba ka'mao jakkalna nangja maina iarang bijoli line-o nangode mandeko current sale siaona sokatgen
- Bijolichi chalaigipa bosturangko Nangana bate chattekna nangja maina iako dakanichi electric spark ong'e wa'al kamaona sokgen
- Bijolini pole ba post, transformer ba bijolini bosturangko dangtapna ba maldona nangja
- Be'enni bak ge'saba sosia ong'ode, bijolini bosturangko dangtapna nangja. Bijolini bosturangko jakkalengon jakrangko ran'e rakkina nanga. Bijolini bosturangmung kanko ka'on rubber-ni jutta aro rubber-ni glove-ko ganna nanga
- Lekka do'reng watengon, botdol nonggimin kidingko jakkalna naja maina iarang bijolini line-ko ratnaba donga ba line-rangko chapdrimana sokate nosto ong'atgen
- Bi'sa chonarangni sokatgnigipa biaprango plug point-rangko chattekna nangja. Power plug-rangko pindape ba chelchake donna nanga, je dakode bi'sarang uko dangtape current saljana gita
- Bijoli line-ni ka'mao roe ba tom'dake dongnabe

- Bijoli line-ni pole ba post-o ba'ra ramani redingko kanabe
- Matburungrangko bijoli line-ni pole ba post-o kae donnabe
- Rod, pipe ba uandakgipa bosturangko bangbanggipa tar ba line teng'brapenggipani sepangona chilangnabe
- Power supply-ko switch off ka'gija bulb ba switch-rangko bodolnabe
- Licensed electrical workman-ko rimgija an'tang saksan bijolini line ba post-o kam ka'nabe ba line salnabe
- Noko bijolini nosto ong'ako u'igija fuse wire-rangko bodolnabe. Bodolna skang u'igipa authorised electrician-chi name dake sing'sandie ra'e fuse wire-rangko bodolbo.
- Bijolini bostuko ia indakgipa bosturang jekai pencil, scale aro chaku ba ketalrangchi tekna ba tarina joton ka'nabe maina iarang bijoli salna ba re'na altubegipa ong.a.
- Noko Bijolini bosturangko an'tang simsakgija ba gualchipe Switch “ON” ka'e donnabe.
- Kamna altugipa bosturang jekai LPG, Petrol aro uandakgiparangko bijoli line-ni ka'mao rakkinabe ba donnabe.
- Bijolini machine, bijolini tar ba line aro transformer ba uandakgipa bijolini bosturango chi satdapnabe.
- Bijoliko saoba u'igijagipa niam gri teknabe ba sintee (Hooking) ra'nabe maina ong'gija tekanichi (wrong connection) ba overvoltage-ni gimin u'igija tekanichi a'sel ba obostarang ong'naba donga. Bijolini tar jatchio sintee (Hooking) ra'a ong'ode tar agre ding'dugae chottome ga'ake a'sel ong'naba donga.
- Kenbeani sign ba Notice board-ko ra'gale galnabe maina ua mikkangchi a'sel ba obosta ong'aniko champenggipa ong'a.
- Energy meter, meterboard-rangni gimin u'igijagipa ba authorized ong'jaode dangtapnabe, maina u'igija dangtapode bijoli nange a'sel ba obostarang ong'naba donga.
- High Voltage, Extra high voltage aro uandakgipani sepangona re'angnabe maina bijoli bilakani ba high ong'ani a'sel current ba bijoli sale sigen aro uani sepangona re'angon dangtapjaoba bijoli bilakani a'sel ba high induction dongani gimin bijoli salgen.
- Bol aro wa'arango High voltage, extra high voltage-ni sepango ga'akdaptnabe maina bilakgipa voltage ba high voltage ong'ani gimin ba induction high ong'ani gimin bijoli sale sinaba donga. Bol aro wa'arang bijolini bilakgipa tar ba line-ni kosako ga'akdapode wa'al teng'brapgen.

- A'ao kam ka'gipa bosturangko, game cha'gipa bosturangko bijolini tar ba line-ni ka'mao donnabe ba chimongnabe; bolrangko bangbanggipa tar ba line-ni ka'mao ge'nabe ba dal'atna on'nabe.
- Sub-station, Supply line, tower-rangni wilwilao 300 meters-onakingking iarangni nokgiparangna seachi u'iatchengija ba written permission-ko ra'chenggija blasting ka'na man'jawa.
- 1,32,000 Voltage-ni tower-ni wilwilao, 10 meters-onsa kingking aro 11,000-33,000 Voltage-ni tower-ni wilwilao 5 meters-onsa kingking tower nokgipani permission gri ba una u'iatgija a'ako ratnabe ba cho'nabe.
- A'ningo dongipa bijolini tar ba cable line-ni kosako wa'al so'nabe.
- Bijolini tar ba line-ni ka'mao je bostukoba wa'al so'na nangja maina overhead tar-ni ka'mao wa'al so'a ong'ode ding'ani a'sel jronge bijolini tar chottomgen.
- Line-ni gimin ba bijolini gimin u'igijagipa ba unauthorized mandeko Bilakbegipa Voltage-ni biapo (High voltage Zone), Kenbeanigipa biapo (Danger Zone) aro iandakgiparangni sepangona re'bagiparangko napna on'nabe.
- A'ao ga'ake donggipa bijoli tar-ko rim'enabe aro sepangona re'angnabe. U'ia ong'ode ta'rakean bijolini Technical Department ba MeECL-ni mandena koborko ba u'iananiko dakbo. Na'a 18 Meters-mangnade ga'ake dongengipa tar ba conductor-oni chel'e dongbo.
- Nokona salbagipa tar ba line-ko overhead tar-ni ka'maoniko service line-ko sale ra'na nangja maina overhead line ba dal'gipa tar baksa nokona salbagipa line-mung (Service line) baksa sepanggrike nangdimode high voltage ong'gen.
- Darang mandeba Transmission line 2,20,000 Voltage-ni sepango itta so'na ba dingtang dingtang dakgipa pollution ong'gipako dakna man'jawa, iarangko 500 meters-ni chel'aosa donna ba rikna man'gen.
- Bijolini kam-ko ka'gipa mande an'tangko chelchakani ba kam ka'mitingo ganne ka'gipa bosturangko ra'e ka'na nangtelgen ong'jaode ua mandena bijolini kamko ka'gipa, department-ni on'gimin chelchakgipa ba ganne ka'gipa bosturangko ra'e ka'na nanggen.
- Manderangni naljokanina, Electrical Inspector-ni seachi approval-ko man'ja dipetna jinma tom'bimongani, jekai concert, street lighting, public meeting, pandal, etc. rango bijoliko on'na man'jawa.
- Current sala manenggipa mandeko dangtapna nangja. Electrical department-o kam ka'gipa mandeko ta'rake ua biapni bijoliko dontongatchina aganna nanga. Jensalo current/bijoliko dontongataha, unosa bijoli sale saknagipa mandeko ra'galna nanga. Ia indakgipa obostani gimin Electricla Inspector na u'iananiko on'na nanga

- Il'riprapaniara bilakbegipa bijoli ong'a. Il'riprapengon bangbanggipa biap ba a'palo chadengna nangja. Nokking donggipa biap ban ok ning'ao dongna nanga

**Dakna nanganirang:**

- Noktangtango bijoli joke katjana gita earthing ko simsake rakkina nanga
- Short-circuit ba wa'al kamanioni jokna gita gitcham wiring-rangko electrical supervisor-chi naitaniko ka'na nanga
- Gadang bongana batgipa nokrang bijoliko man'na skang electrical safety clearance ko Electrical Inspector-oniko ra'echengna nanga
- Je bijolini bosturangkon supplier/MeECL nokrango chatteke donangahachim, uarangko manderang dangtapna nanga
- Pilak nokni wiring-o namgipa rating-ni fuse ba MCB rangko chatteknna nanga, je dakode maiba nosto ong'na nangode wa'al kamaniona sokjachina gita
- Pilak substation-rangko name dake barbed wire-chi bera kae donna nanga, je dakode manderang ba matburung rang skatang nape rona man'jawa
- 33,000 Volt line-rangko sorok gita ra'sotengon guarding ba guard wire rang-ko on'na nanga
- Bijolini line ge'sa ge'gipinni sepanggriko dongode gurading-ko on'na nanga je dakode uarang chapdrimaona sokjana gita
- Diesel Generating Set/Captive Plant (9.5 kVA aro una batgiprang)-ni nokgiparang iarangko jakkalna skang Electrical Inspector-niko seachi approval ba clearance-ko ra'echengna nanga
- Bijolini pole ba post-o GI barbed wire-ko 9 (sku) feet-on a kingking dawilike donna nanga je dakode iarangkok bi'sarang gadona ba maldona man'jana gita
- Conductor-rango ge'sa span-o ge'sa joint-na bate dongna nanga
- Dingtang dingtang voltage-ni conductor-rangko apsan support-o donode, guarding ba chelchakaniko on'na nanga je dakode ge'sa conductor go'okoba gipinrangmung nangdrimjawa
- Control room ba switching station ning'o switching panel board-ni mikkango, a'ao rubber-ni mat-ko bijolini a'sel ong'aoni chelchakna gita donna nanga
- Je mandean bijolini supply line ba bosturango kamko ka'na donatako man'achim, ua mande bijolioni naljokatani bosturang jekai jakna glove, helmet, jang'ke, belt-rangko jakkalna nanga
- Chi ra'giparang pipe-ko bijolini krongo nangatnabe maina bijolini tar leakage ong'ode chi-ni pipe gita bijoli rang'san chi pipe salgipa/ra'gipa gimikchi salgen aro uandake

an'chingni nokona salbagipa pipe gitaba bijoli re'gen. Unigimin chi pipe-rangko bijolini krongni sepangoniko simsake donna nanga.

- Inverter/UPS aro Diesel Generator (D.G.) set-rangko jakkalon interlock switch aro changeover switch-rangko donna nanga. Iarangko jakkaljaode nokoni/building-oni bijolini re'bapilgipa ba re'pilbagipa bijoli (back current) re'gen, uni gimin ia switch-rangko jakkale re'bapilgipa bijoli (reverse current ba back current) re'aniko champengna nanga aro tar-o bijoli re'na nangjawa, maina bijolio kam ka'giparangko back current ba re'pilbagipa bijoli dongode, bijoli sale sakinarangko man'gen ba sinaba donga. MeECL bijoliko discontinue ka'naba donga bijoli leakage ba re'a ong'ako u'ia ong'ode aro ia apsanko Electrical Inspector-naba u'iatna nanggen.
- Periodical Inspection-o wiring-rangko electrical Supervisor Licence donggipa safe ong'a ma ong'ja uarangko nina ba check ka'na nanga. Bijolini wiring-rango safety dongama dongja jekai earthing aro uandakgipa dingtang dingtang safety-rangko nina nanggen. Bijoliko jakkalgiparang plain paper ba letter head-o Office of the Inspectorate of Electricity-na safety-ko nina chitti sena nanggen; iarangna bang'gija charge ba tangka gamna nanggen.
- Electrical line, sub-station aro Electrical machine-rango safety dongama dongja, obosta ba condition-rang namama namja-ko nina Periodical inspection-ko ka'na nanggen aro uarang Regulation ni gita ong'na nanggen. Indakgipa line aro sub-station-rang aro machine-rangko Rules and Regulations-ni ning'o sea gita Office of the Inspectorate of Electricity-chi periodical inspection-ko ka'na nanga.
- House wiring-ko ka'na gita ISI mark donggipa, namgipa bijolini bosturangkosan jakkalaibo. Dam komibegipa bosturang ba company-ni biming gri gipa bijolini bosturangko jakkala ong'ode bijoli salnaba donga (Short circuit) aro wa'al kamnaba donga.
- Chubegipa buildingni kosako ba a'bri chubegipani kosako building dongode mikka kimpretani tar-ko (lightning conductor) buildingni chubatgipa point/biapo donna nanga, jedakode mikka kimpregipa a'ningchi napangna man'gen..
- Saoba X-ray aro apsan dakgipa high frequency-ni bosturangko breode (installation) uani nokgipa Electrical Inspector-oniko jakkalna ba ra'bana skang approval-ko ra'na nanggen. Iandakgipa X-ray aro high frequency bosturangko periodical inspection ka'na nanggen aro approval-ko Electrical Inspector-oniko ra'na nanggen.
- Electric lift aro Escalator-ni nokgipa uarangko jakkalna skang niate ba test ka'ate Electrical Inspector-ni approval-ko man'chengna nanggen.

- Teng'gipa sign-rang jean 650 Volt-na bata indiba 33,000 Volt-na komia, uko jakkalgipa ba uni nokgipa uarangko jakkalna skang Electrical Inspector-ni approval-ko ra'echengna nanggen.
  - Mikka kimpreatmiting somoio nosto ong'aoniko champengna gita bijolini bosturang jekai TV, refregerator, ACs, geyser etc.-rangko jakkalnabe ba Switch "ON" ka'nabe.
  - Noko mande bijolini tar-o nange a'sel ong'ode, ua mandeko aro bijoli re'gipa bosturangko dangtapnabe, maina bijoli nanggipa mandeko dangtapode nang'o bijoli re'naba donga. Main power re.bagipako jekai circuit breaker/MCB/cut-out aro bosturangko leather belt-ko jakale shutdown ka'chengbo, uni ja'mano chatgipa aro ran'a rubber boots ba rubber gloves-ko gane aro ran'gipa boltong/go'ol-ko jakkale bijolini salgipa tar-oniko mandeko gipin biapona jitatbo. Ua biapni MeECL-ni technical mandena ta'raken u'iananiko dakbo aro office of the Electrical Inspector-na u'iananiko dakbo.
  - Bijoli salaoniko mandeko bikotani ba ra'ongkatani ja'man, ua mande mamingkoba u'ijaode ba sibokode sannani ba treatment-ko on'na gita Ambulance-na ta'raken call ka'atbo. Je mandeo ma'siani aro u'iani dongipasan skanggipa sanna banna niko (first aid) sibokgipana on'na man'gen.
  - Jensalo bijolini tar nange ba ma'bake jeba mande ba matburungo bijoli sale saknarangko man'ode biljimgipa voltage-oniko ba high voltage (440 Volt aro una batgipa) ua mande ba matburunrangona re'ange dangtapenabe. Ta'raken ua area ba biapni technical mandena bijoli department MeECL-oni power supply-ko switch "OFF" ka'na call ka'atbo aro emergency medical service jekai Ambulance-na call ka'atbo. Bijolini gimin u'igipa ba ma'sigipa mande insulation stick ong'jaode ran'a wa'ani gol'dikko jakkale bijolini tar-oniko bijoli sale saknaako man'e dongenggipa mandeko ra'ongkatna man'gen, indiba gipinko dakchakna skang an'tangko simsakaniko dakchengbo. Ia apsan u'iananiko Electrical Inspector-ona ra'babo.
- JA'RIKBO BIJOLINI NIAMRANGKO.....NAME DONGBO.

*Manderangna namgniko u'iatgipa Senior Electrical Inspector, Inspectorate of Electricity, Lower-Lachumiere, Meghalaya, Shillong.*

Senior Electrical Inspector,  
Meghalaya, Shillong.