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# Maintenance Coordination Requirement Distribution Code By : Zahari Hj Dollah





Distribution Code Awareness Programme Funded by Akaun Amanah Industri Bekalan Elektrik (AAIBE)





### 6.10 Maintenance Coordination Requirements

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#### 6.10.1 General



6.10.1.1 It is necessary for the Distributor and Users connected to the Distribution System to maintain an up to date record of the network and equipment as well as to coordinate scheduled maintenance of equipment. This section provides requirements for the Distributors, Distributed Generators, Consumers and Embedded Distributors on maintaining information on Distribution System Equipment and User System Equipment and the need for exchange of this information as well as coordination of maintenance of Equipment including Protection equipment at the points of interface.





2 Maintaining Records on Distribution System User Equipment



6.10.2.1 The Distributor is responsible for maintaining information on Distribution System Equipment which includes but is not limited to the following:

\_ Cable/line routes along all public roads and access; and Equipment locations, types, makes and capacities.

6.10.2.2 The Distributor, on a written request by any person will provide the relevant parts of the information to the requesting person provided that the Distributor is satisfied that the purpose of such request is to safeguard the Distributor's Equipment and installation from any external damage due to the work that the requesting person intends to perform near the installation.



### 6.10.2 Maintaining Records on Distribution System User Equipment



6.10.2.3 All Distributed Generators, Consumers and Embedded Distributors connected to the Distribution System are responsible for maintaining information of their respective Equipment including cable/lines routes, Equipment locations, types, the makes and capacities. On the request of the Distributor, such information shall be provided in a reasonable time.

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#### 6.10.3 Maintenance Coordination of Equipment at the Point of Interfaces



6.10.3.1 The Distributor is responsible for coordination of maintenance of Equipment at the points of interface with Users with the view to minimizing or eliminating a supply interruption to Users in accordance with the following: (a) where in the opinion of the Distributor the deferment of the scheduled outage is necessary then the Distributor will suggest to the User an alternative suitable date and time for the outage and unless the deferment is in conflict with requirements of the User's legal obligations or Licence condition, the User shall defer the outage according to the requirement of the Distributor; and (b) as far as possible scheduled outages resulting in a supply

interruption shall be arranged during the period of low electricity Demand.



### 6.10.4 Protection Equipment and Revenue Metering Equipment Maintenance



6.10.4.1 Inspection, maintenance and test of Protection Equipment and Revenue Metering Equipment and associated control and ancillary equipment may require outages of primary equipment and/or a supply interruption. The Distributor is responsible for coordinating with Users regarding the maintenance of protective and metering equipment at the points of interface with the view to minimizing or eliminating a supply interruption to Users in accordance with the following:

(a) inspection, test and maintenance of any protection or metering equipment shall where possible avoid the need for a supply interruption;



#### 6.10.4 Protection Equipment and Revenue Metering Equipment Maintenance



(b) where in the opinion of the Distributor the deferment of the protection or metering equipment maintenance is necessary to avoid a supply interruption then the Distributor will suggest to the User an alternative suitable date and time for the outage and unless the deferment is in conflict with requirements of the User's legal obligations or Licence condition, the User shall defer the outage according to the requirement of the Distributor;

(c) where reasonable, protection and metering equipment maintenance that will result in a supply interruption shall be arranged during the period of low electricity Demand.





6.10.5.1 The Distributor is responsible for ensuring that settings of protective relays in the Distribution System, at the points of interfaces with Users and inside the System of Users are coordinated to ensure selective operations of all relays irrespective of the location of the faults. The relevant parties will follow the procedure set out in

6.10.5.2 of the DOC when coordination of relay settings is to be carried out.





### 6.10.5 Protection Equipment Coordination (Cont)



6.10.5.2 Users connected to the MV Distribution System are responsible for carrying out regular review of the relay settings of their generating plant and/or System including their interfaces with the Distribution System and shall also carry out a review whenever they intend to modify their Protection arrangements or settings. The Distributor may from time to time request from Users connected to the MV Distribution System the relay setting review report. Users are obliged to submit the report when a review is requested or modification to the Protection and/or Protection settings is being proposed by the User within a mutually agreeable time frame

(a) the relay setting review report shall include the proposed settings of all relays in the plant including at the point of interfaces with the Distribution System, reason for the settings, capability limits of all equipment in the plant, relay settings range and any other relevant information and assumptions pertaining to the Protection relay setting calculations;



#### 6.10.5 Protection Equipment Coordination (Cont)



#### 6.10.5.2

(b) on receipt of the relay setting review report, the Distributor will carry out an assessment of the impact of the settings on the Distribution System and if necessary calculate new settings to ensure maximum security of supply and approve the changes suggested by the User if appropriate; and
(c) the settings of the User's Protection can be changed to the settings approved by the Distributor only when the corresponding relays setting changes in the Distribution System have been made by the Distributor.





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6.10.5.3 Not withstanding the above requirements the Distributor and Users connected to the Distribution System shall be responsible for safeguarding and protecting their own equipment against any short-circuits and/or disturbances in both Systems.









## THANK YOU





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