

RELAY COORDINATION & ARC

FLASH ANALYSIS

INPUT REQUIREMENT CHECKLIST

COMPILED BY

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Let's Build a Safer Electrical World

PIER ENGINEERING SOLUTIONS – AHMEDABAD, GUJARAT (INDIA)

Disclaimer:

This checklist is a guidance tool compiled from common electrical design practices and widely accepted industry standards. It outlines typical information required for electrical studies. Actual project requirements may vary based on the nature and scope of work.

REQUIRED INPUT LIST

<i>Sr. No</i>	<i>Documents/Data</i>	<i>Known/ Available</i>	<i>Unknown/ Unavailable</i>
1.	Key Single Line Diagram	<input type="checkbox"/>	<input type="checkbox"/>
2.	Metering & Protection Diagram	<input type="checkbox"/>	<input type="checkbox"/>
3.	Plant Operating Philosophy (Normal / Critical / DG Mode) and cases for minimum & maximum power flow conditions	<input type="checkbox"/>	<input type="checkbox"/>
4.	NGR Detail	<input type="checkbox"/>	<input type="checkbox"/>
5.	Utility Supply Parameters (Voltage, Cable/Line)	<input type="checkbox"/>	<input type="checkbox"/>
6.	Minimum & maximum fault current with X/R ratio	<input type="checkbox"/>	<input type="checkbox"/>
7.	Circuit Breaker Min & Max Operating time Tolerance (Vendor Manual/Catalogue)	<input type="checkbox"/>	<input type="checkbox"/>
8.	Transformer Vendor Datasheet	<input type="checkbox"/>	<input type="checkbox"/>
9.	Transformer Tap Position	<input type="checkbox"/>	<input type="checkbox"/>
10.	Generator Vendor Datasheet, Make, Model, Alternator Details etc	<input type="checkbox"/>	<input type="checkbox"/>
11.	UPS / Inverter Vendor Datasheet	<input type="checkbox"/>	<input type="checkbox"/>
12.	APFC Vendor Documents	<input type="checkbox"/>	<input type="checkbox"/>
13.	Filters / Harmonic Mitigation Equipment	<input type="checkbox"/>	<input type="checkbox"/>
14.	Motor Vendor Datasheet & Curves with Acceleration details	<input type="checkbox"/>	<input type="checkbox"/>
15.	Feeder-wise relay/release/fuse type, make, PMS, TMS, and curve type data	<input type="checkbox"/>	<input type="checkbox"/>
16.	Detailed technical vendor setting catalogues of each type of relay, release, and fuse	<input type="checkbox"/>	<input type="checkbox"/>
17.	Voltage Transformer data	<input type="checkbox"/>	<input type="checkbox"/>
18.	Circuit breaker / Switchgear ratings such as fault current carrying capacity, normal current capacity, and thermal withstand and opening time of LV and HV circuit breakers.	<input type="checkbox"/>	<input type="checkbox"/>

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19.	Relay Order Number	<input type="checkbox"/>	<input type="checkbox"/>
20.	Existing Relay setting (if any)	<input type="checkbox"/>	<input type="checkbox"/>
21.	Front facia Picture of Relay	<input type="checkbox"/>	<input type="checkbox"/>
22.	Switchgear busbar clearance data / general arrangement (GA) drawing	<input type="checkbox"/>	<input type="checkbox"/>
23.	Electrical Load List	<input type="checkbox"/>	<input type="checkbox"/>
24.	Any other data relevant for the study	<input type="checkbox"/>	<input type="checkbox"/>
25.	Electrical Cable Schedule	<input type="checkbox"/>	<input type="checkbox"/>
26.	Vendor Cable Datasheet	<input type="checkbox"/>	<input type="checkbox"/>
27.	Template for Reports (Native File)	<input type="checkbox"/>	<input type="checkbox"/>

If any required data is not available, we will coordinate with your team to obtain it. In cases where information remains unknown, it will **not** be ignored. Instead, we will incorporate it using **conservative assumptions** grounded in **sound engineering judgement**, and clearly highlight these in our documentation wherever relevant