JAYA CM	PROJECT TECHNICAL DATA	Nomor :
		Halaman :
BIRO ENGINEERING	KETENAGA LISTRIKAN	Tanggal :

NAMA PROYEK	:	**MUARA KARANG**
PEMILIK	:	**PT PLN (Persero)**
JENIS PROYEK	:	**Pembangkit Listrik Tenaga Gas Uap**
LOKASI	:	**PT PJB UP Muara Karang Jl. Pluit Karang Ayu No. 1, Jakarta Utara.**
PERIODE PELAKSANAAN	:	**Agustus 2016 s/d Sekarang**

NO	DESCRIPTION				
1	**DESIGN SPESIFICATION**		VALUE	UNIT	KETERANGAN
	LUAS LAHAN	:	3,750	Ha	
	BIAYA KONSTRUKSI	:	3.380.080.398.585,00	Rp	
	OUTPUT CAPACITIES NETT SIMPLE CYCLE	:	341,30	MW	
	OUTPUT CAPACITIES NETT HRSG	:	158,70	MW	
	OUTPUT CAPACITIES NETT COMBINED CYCLE	:	500,00	MW	
	AUXILIARY POWER COMSUMPTION COMBINED CYCLE	:	12,70	MW	
	OUTPUT GROSS CAPACITIES COMBINED CYCLE	:	512,70		
	GAS TURBINE FLOW	:	2.541,00	Ton/Hour	
	STEAM TURBINE CONSUMTION	:	442,00	Ton/Hour	
	HRSG (Heat Recovery Steam Generator)	:		MW	
	GAS TURBINE GENERATOR	:	428,00	MVA	
	STEAM TURBINE GENERATOR	:		MW	
	TOTAL GENERATOR	:			
	GAS TURBINE TRANSFORMER	:			
	STEAM TURBINE TRANFORMER	:	215,00	MVA	
	TOTAL TRANSFORMER	:			
	WTP	:		M3/Hour	
	WWTP	:		M3/Hour	
2	**ENGINE CONFIGURATION**	:			
	MANUFACTURER	:			
	MODEL	:			
	ENGINE TYPE	:			
	FUEL TYPE	:			
	UNIT NUMBER	:			
	COOLING SYSTEM	:			
	NOMINAL SPEED (RPM)	:			
	NOMINAL POWER (KW)	:			
	FLUE FLOW (KG/H)	:			
	EFFICIENCY	:			
3	**ENGINEE GENERATOR**	:			
	MANUFACTURER	:			
	MODEL	:			
	TYPE	:			
	COLING SYSTEM	:			
	CLASS OF RATING	:			
	CAPACITY	:			
	RATED TERMINAL VOLTAGE(V	:			
	RATED CURRENT(A)	:			
	RATED OUTPUT(KVA)	:			
	RATED POWER (KW)	:			
	RATED VOLTAGE	:			
	EFFICIENCY	:			
4	**TURBINE**	:			
	MANUFACTURER	:			
	MODEL	:			
	TYPE	:			
	RATED POWER (MW)	:			
	UNIT NUMBER	:			
	MAIN STEAM RATED PRESS. UPSTREAM (Mpa)	:			
	MAIN STEAM RATED TEMP. UPSTREAM (C)	:			
	MAIN STEAM RATED FLOW RATE (C)	:			
	RATED ROTATING SPEED (RPM)	:			
	MAXIMUM STEAM INPUT VOLUME (t/h)	:			
	RATED BACK PRESSURE (Kpa)	:			
	FINAL FEEDWATER TEMPERATUR (C)	:			
	CALCULATED HEAT CONSUMPTION (TMCR	:			
	CONDITION) (kJ/KW.H)	:			
5	**BOILER**				
	MANUFACTURE	:			
	TYPE	:			
	MODEL	:			
	FLOW RATE (t/h)	:			
	STEAM OUTLET PRESSURE (MPa)	:			
	STEAM OUTLET TEMPERATURE (C)	:			
	FEEDWATER TEMPERATURE (C)	:			
	PRIMARY AIR HOT TEMPERATURE (C)	:			
	SECONDARY AIR HOT TEMPERATURE (C)	:			
	FLUE GAS OUTLET TEMPERATURE (C)	:			
	BOILER GUARANTED HEAT EFFICIENCY	:			
	(DESIGNED COAL, HHV) (%)	:			

NO	DESCRIPTION				
6	**HRSG**	:			
	MANUFACTURE	:			
	MODEL	:			
	TYPE	:			
	GAS FLOW DIRECTION	:			
	TYPE OF EVAPORATOR CIRCULATION	:			
	TYPE OF CONDENSATE DEARATION	:			
	DESIGN TEMPERATURE(C)	:			
	DESIGN PRESSURE(MMH2O)	:			
	DUCT MATERIAL	:			
	TYPE OF INSULATION	:			
	INSULATION MATERIAL & THICKNESS	:			
	MAX MEAN GAS VELOCITY (M/S)	:			
	EFFICIENCY	:			
7	**HRSG GENERATOR**	:			
	MANUFACTURER	:			
	MODEL	:			
	TYPE	:			
	UNIT	:			
	CAPACITY	:			
	BOILER TYPE	:			
	RATED TERMINAL VOLTAGE(V	:			
	RATED CURRENT(A)	:			
	RATED OUTPUT(KVA)	:			
	MAXIMUM VOLTAGE	:			
	OPERATING VOLTAGE	:			
	RATED SHORT TIME WITHSTAND CURRENT (AC component)	:			
	Phase - neutral	:			
	phase - phase	:			
	phase 3	:			
	CB TYPE	:			
		:			
8	**POWER TRANSFORMER (GENERATOR TRANSFORMER ; UNIT AUXILIARY TRANSFORMER ; STATION SERVIS)**	:			
	Generator Transformer				
	MANUFACTURE	:			
	MODEL	:			
	TYPE	:			
	RATED CAPACITY	:			
	CLASS AND TYPE OF CORE	:			
	PHASE	:			
	TRANSFORMER RATING AT FULL LOAD (OFAF)	:			
	NOMINAL SYSTEM VOLTAGE (LINE TO LINE) (KV)	:			
	TRANSFORMER CONNECTION(WYE OR DELTA)	:			
	COOLING TYPE	:			
	Auxiliary Transformer	:			
	MANUFACTURE	:			
	MODEL	:			
	TYPE	:			
	RATED CAPACITY	:			
	CLASS AND TYPE OF CORE	:			
	PHASE	:			
	TRANSFORMER RATING AT FULL LOAD (OFAF)	:			
	NOMINAL SYSTEM VOLTAGE (LINE TO LINE) (KV)	:			
	TRANSFORMER CONNECTION(WYE OR DELTA)	:			
	COOLING TYPE	:			
9	**HEATING SYSTEM**				
	HP HEATER	:			
	MANUFAKTUR	:			
	MODEL	:			
	NUMBER OF HP HEATERS	:			
	OPERATING PRESSURE (MPa)	:			
	OPERATING TEMPERATURE (C)	:			
	MAXIMUM FLOW (T/H)	:			
	LP HEATER	:			
	MANUFAKTUR	:			
	NUMBER OF LP HEATERS	:			
	MODEL	:			
	TYPE	:			
	OPERATING PRESSURE (MPa)	:			
	OPERATING TEMPERATURE (C)	:			
	MAXIMUM FLOW (T/H)	:			
	DEAERATOR	:			
	MANUFAKTUR	:			
	NUMBER OF EQUIPMENT (UNIT)	:			
	WORKING PRESSURE (MPa)	:			
	WORKING TEMPERATURE (C)	:			
	NORMAL OUTPUT (T/H)	:			
	NET WEIGHT OF THE EQUIPMENT (KG)	:			
	FILLING WATER WEIGHT (KG)	:			
	EFECTIVE VOLUME (M3)	:			

NO	DESCRIPTION				
10	**PUMP**				
	CONDENSATE PUMP	:			
	MANUFAKTUR	:			
	MODEL	:			
	TYPE	:			
	FLOW	:			
	HEAD (Mpa)	:			
	POWER	:			
	VOLTAGE	:			
	SPEED (RPM)	:			
	BOILER FEED PUMP	:			
	MANUFAKTUR	:			
	MODEL	:			
	TYPE MOTOR	:			
	FLOW (T/H)	:			
	SPEED (RPM)	:			
	HEAD (MPa)	:			
	POWER (KW)	:			
	VOLTAGE (KV)	:			
	UNIT NUMBER (UNIT)	:			
	CLOSE COOLING WATER PUMP	:			
	MANUFAKTUR	:			
	MODEL	:			
	TYPE MOTOR	:			
	FLOW (T/H)	:			
	SPEED (RPM)	:			
	HEAD (M)	:			
	POWER (KW)	:			
	VOLTAGE (KV)	:			
	UNIT NUMBER (UNIT)	:			
		:			
	VACUUM PUMP	:			
	MANUFAKTUR	:			
	TYPE	:			
	FLOW	:			
	PRESSURE	:			
	CAPACITY (KG3/H)	:			
	EFFICIENCY	:			
	UNIT NUMBER	:			
		:			
	TURBINE OVERHEAD CRANE	:			
	MANUFAKTUR	:			
	NUMBER OF EQUIPMENT (UNIT)	:			
	MODEL	:			
	TYPE	:			
	OPERATING PRESSURE (MPa)	:			
	OPERATING TEMPERATURE (C)	:			
	MAXIMUM FLOW (T/H)	:			
	CONDENSER	:			
	MANUFAKTUR	:			
	MODEL	:			
	COOLING SURFACE (M2)	:			
	BACK PRESSURE (MPa)	:			
	DESIGN PRESSURE OF WATER CHAMBER (MPa)	:			
	FLOW OF COOLING WATER (T/H)	:			
	DESIGN TEMP. OF COOLING WATER (C)	:			
	NETT-WEIGHT (T)	:			
	STEAM SIDE (M3)	:			
	MATERIAL OF TUBE	:			
	TOTAL NUMBER OF COOLING PIPE (Pc)	:			
	COOLING PIPE LENGTH (mm)	:			
	FILLED WATER WEIGHT (T)	:			
	ESP	:			
	MANUFAKTUR	:			
	TYPE	:			
	FLOW INLET (M3/S)	:			
	INLET TEMPERATUR (C)	:			
	INTAKE PUMP				
	MANUFAKTUR	:			
	MODEL	:			
	TYPE	:			
	FLOW				
	PRESSURE				
	CAPACITY	:			
	EFFICIENCY				
	CONDENSATE PUMP				
	MANUFAKTUR				
	MODEL				
	TYPE	:			
	FLOW	:			
	HEAD (Mpa)	:			
	POWER	:			
	VOLTAGE	:			
	SPEED (RPM)	:			
	BOILER FEED PUMP				
	MANUFAKTUR	:			
	MODEL	:			
	TYPE MOTOR	:			
	FLOW (T/H)	:			
	SPEED (RPM)	:			
	HEAD (MPa)	:			

NO	DESCRIPTION					
	POWER (KW)		:			
	VOLTAGE (KV)		:			
	UNIT NUMBER (UNIT)		:			
11	**WATER TREATMENT SYSTEM**		:			
	A. ONCE THROUGH SYSTEM (AIR LAUT)					
	B. CLOSE COOLING SYSTEM (AIR TAWAR)					
	WTP					
	SYSTEM		:			
	MANUFAKTUR		:			
	MODEL		:			
	TYPE		:			
	CAPACITY		:			
	WWTP					
	SYSTEM		:			
	MANUFAKTUR		:			
	MODEL		:			
	TYPE		:			
	CAPACITY		:			
	DESALINATION WATER PRODUCTION					
			:			
	DEMINERALIZED WATER PRODUCTION		:			
			:			
12	**FUEL SYSTEM**					
	OIL SYSTEM	CAPACITY	:			
		FLOW	:			
		PRESSURE	:			
		CONSUMTION	:			
	COAL SYSTEM	CAPACITY	:			
		COAL	:			
		FLY ASH CAPACITY	:			
		BOTTOM ASH CAPACITY	:			
		ASH DISPOSAL AREA	:			
		LIME STONE HANDLING AREA	:			

NO	DESCRIPTION					
13	**CIVIL WORK**					
	POWER PLANT	LARGE AREA	:			
	POWER PLANT FOUNDATION WORKS	TYPE OF FOUNDATION	:			
		DIMENSION OF FOUNDATION	:			
		NUMBER OF FOUNDATION	:		NOS/PILE	
		DEPTH OF FOUNDATION	:		MM	
					mm	
		CONCRETE GRADE	:		MPA	
		REBAR GRADE	:		MPA	
	JETTY CONSTRUCTION	DIMENSION OF JETTY	:		M	
	(Jika di lapangan menggunakan struktur jetty)	TYPE OF FOUNDATION	:			
		NUMBER OF FOUNDATION	:		NOS/PILE	
		DEPTH OF FOUNDATION	:		MM	
		CONCRETE GRADE	:		MPA	
		REBAR GRADE	:		MPA	
	FOUNDATION ENGINE	DIMENSION	:		MM2	
		THICKNESS	:		MM	
		CONCRETE GRADE	:		MPA	
		REBAR GRADE	:		MPA	
		LEAN CONCRETE	:		MM	
		ANCHOR BOLT TYPE	:			
		ANCHOR BOLT SIZE	:			
	FOUNDATION POWER HOUSE	DIMENSION	:		MM2	
	(TRANSFORMER, AUXILARY TRANSFORMER)	THICKNESS	:		MM	
		CONCRETE GRADE	:		MPA	
		REBAR GRADE	:		MPA	
		LEAN CONCRETE	:		MM	
		ANCHOR BOLT TYPE	:			
		ANCHOR BOLT SIZE	:			
	FOUNDATION TURBINE	DIMENSION	:		MM2	
		THICKNESS	:		MM	
		CONCRETE GRADE	:		MPA	
		REBAR GRADE	:		MPA	
		LEAN CONCRETE	:		MM	
		ANCHOR BOLT TYPE	:			
		ANCHOR BOLT SIZE	:		mm	
	FOUNDATION BOILER	DIMENSION	:		MM2	
		THICKNESS	:		MM	
		CONCRETE GRADE	:		MPA	
		REBAR GRADE	:		MPA	
		LEAN CONCRETE	:		MM	
		ANCHOR BOLT TYPE	:			
		ANCHOR BOLT SIZE	:			
	FOUNDATION PUMP HOUSE	DIMENSION	:		MM2	
		THICKNESS	:		MM	
		CONCRETE GRADE	:		MPA	
		REBAR GRADE	:		MPA	
		LEAN CONCRETE	:		MM	
		ANCHOR BOLT TYPE	:			
		ANCHOR BOLT SIZE	:			
	FOUNDATION WAREHOUSE/ WORKSHOP	DIMENSION	:		MM2	
		THICKNESS	:		MM	
		CONCRETE GRADE	:		MPA	
		REBAR GRADE	:		MPA	

NO	DESCRIPTION					
		LEAN CONCRETE	:		MM	
		ANCHOR BOLT TYPE	:			
		ANCHOR BOLT SIZE	:			
	FOUNDATION WTP / WWTP	DIMENSION	:		MM2	
		THICKNESS	:		MM	
		CONCRETE GRADE	:		MPA	
		REBAR GRADE	:		MPA	
		LEAN CONCRETE	:		MM	
		ANCHOR BOLT TYPE	:			
		ANCHOR BOLT SIZE	:			
	Peralatan/ mesin yang memerlukan pondasi bisa ditambahkan sesuai kebutuhan di site (lapangan)					
	STACK	HEIGHT OF STACK	:			M
		TYPE OF STACK	:			
		NO OF INNER LINE	:			
	POND					
	a. MAIN POND					
	b. REGULATING POND					
	ROAD PAVEMENT (RIGID PAVEMENT)	FOUNDATION TYPE	:			
		FOUNDATION DIMENSION	:			MM
		FOUNDATION DEPTH	:			M
		PAVEMENT THICKNESS	:			CM
		LEAN CONCRETE THICKNESS	:			CM
		REBAR STEEL GRADE	:			MPA
		CONCRETE GRADE	:			MPA
		CONCRETE SLUMP	:			CM
	STEEL STRUCTURE	**AREA BOILER 1# & 2#**	:			
		COLUMN STEEL DIMENSION	:			MM
		1st Layer				
		STEEL GRADE (fu)	:			
		ANCHOR BOLT GRADE	:			
		WELD THICKNESS	:			MM
		AREA ESP 1# & 2#				
		COLUMN STEEL DIMENSION	:			MM