PERTAMINA GAS

PERTAGAS INTEGRATED PIPELINE AND ENERGY SUMMIT

SUCCESS STORY
PROYEK BOOSTER PUMP
BATANG HO dan KOTA BATAK SLC

Danny Ardiantara

1. ROKAN PROJECT PROFILE

Outline

I. Rokan Project Profile
II. Latar Belakang masalah
III. Strategi Percepatan
    I. Project S Curve
    II. Struktur Organisasi
    III. Engineering
    IV. Procurement
    V. Construction
IV. Dokumentasi
V. Kesimpulan

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1. ROKAN PROJECT PROFILE

1. ROKAN PROJECT PROFILE

Obyektif proyek	Mendukung program Pemerintah dalam meningkatkan lifting dari Blok Rokan yang merupakan back-bone (sepertiga) produksi minyak bumi nasional.
Ruang lingkup	**Rokan v3.0 Additional Scope Booster Pump Station** Booster Pump Station Batang HO dan KBJ SLC
Pelaksana	Base Scope : **Kons. PGASOL – PDC (“KPP”)** Penyesuaian Pompa : **PT Elnusa Tbk** Booster Pump Paket 1 : **Kons. ELN – PGASOL (KEP)** Batang Station Paket 2 : **PT. PGASolution** KBJ Station Paket 3 : **PT Elnusa Tbk**
Panjang Pipa ; Spec	342 km ; 13 Segmen pipeline 4”s/d 24”OD API Grade B
Jangka Waktu Pelaksanaan	**Paket 1 : 17 Jan’24 – 16 April’25 (15 Bulan)** **Paket 2 : 15 Maret’24 – 14 Mei’25 (14 Bulan)** **Paket 3 : 15 Maret’24 – 14 Mei’25 (14 Bulan)**
Capasitas Pump	**Batang Station : 90.000 bopd / @ 30.000 bopd (4 Unit)** **KBJ Station : 120.000 bopd / @ 30.000 bopd (5 unit)**

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2. STRATEGI PERCEPATAN

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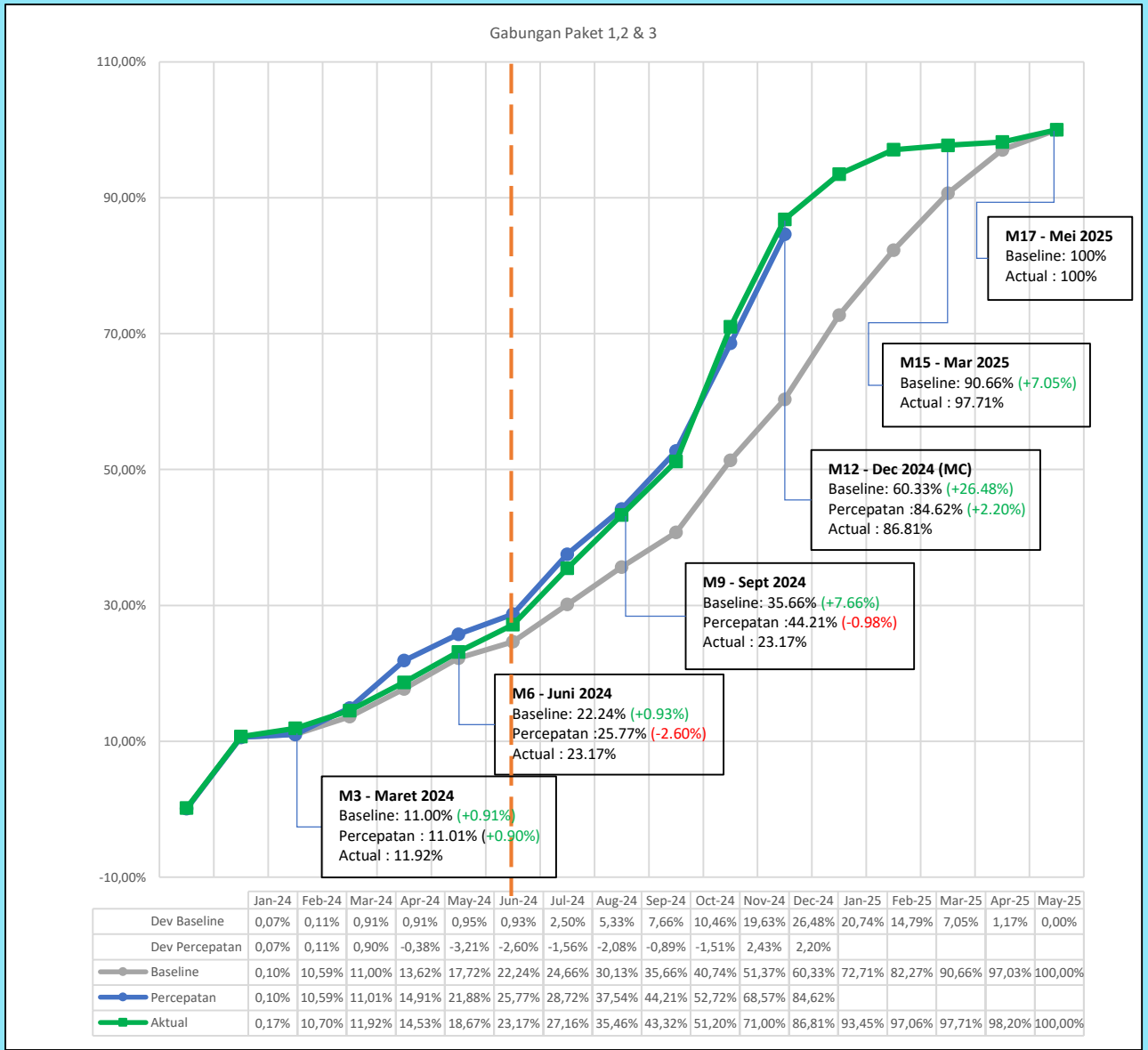
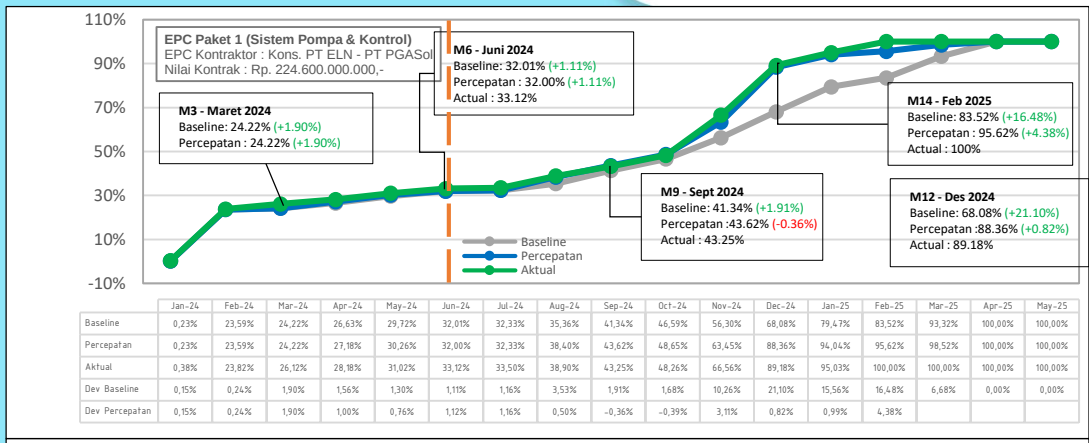
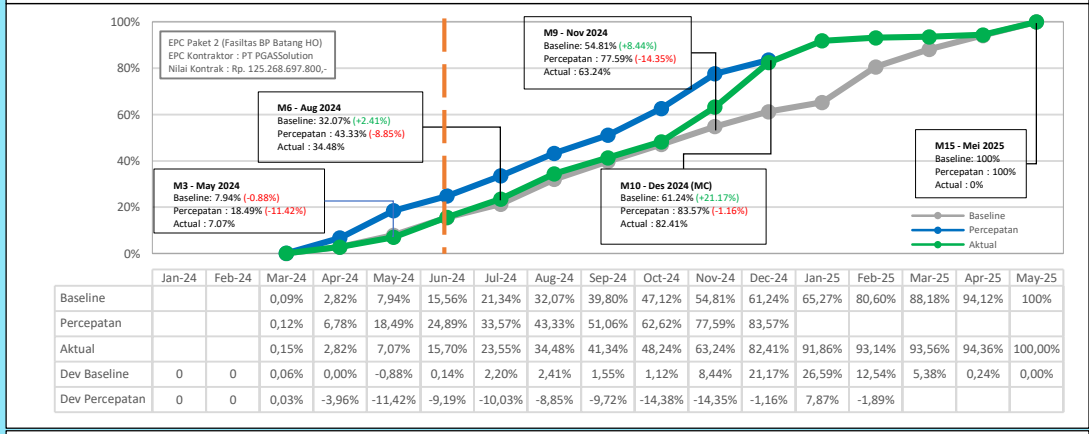
I. PROJECT S-CURVE



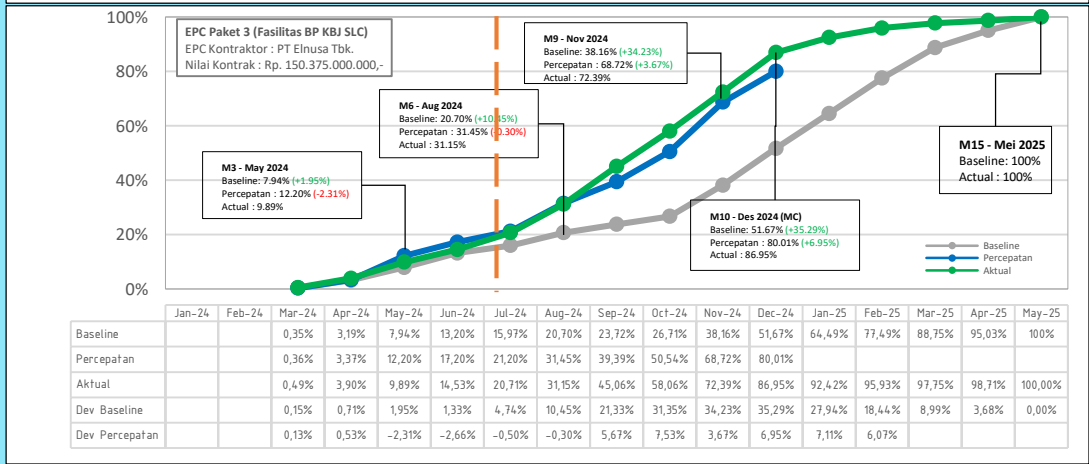
	Jan-24	Feb-24	Mar-24	Apr-24	May-24	Jun-24	Jul-24	Aug-24	Sep-24	Oct-24	Nov-24	Dec-24	Jan-25	Feb-25	Mar-25	Apr-25	May-25
Dev Baseline	0,07%	0,11%	0,91%	0,91%	0,95%	0,93%	2,50%	5,33%	7,66%	10,46%	19,63%	26,48%	20,74%	14,79%	7,05%	1,17%	0,00%
Dev Percepatan	0,07%	0,11%	0,90%	-0,38%	-3,21%	-2,60%	-1,56%	-2,08%	-0,89%	-1,51%	2,43%	2,20%					
Baseline	0,10%	10,59%	11,00%	13,62%	17,72%	22,24%	24,66%	30,13%	35,66%	40,74%	51,37%	60,33%	72,71%	82,27%	90,66%	97,03%	100,00%
Percepatan	0,10%	10,59%	11,01%	14,91%	21,88%	25,77%	28,72%	37,54%	44,21%	52,72%	68,57%	84,62%					
Aktual	0,17%	10,70%	11,92%	14,53%	18,67%	23,17%	27,16%	35,46%	43,32%	51,20%	71,00%	86,81%	93,45%	97,06%	97,71%	98,20%	100,00%



	Jan-24	Feb-24	Mar-24	Apr-24	May-24	Jun-24	Jul-24	Aug-24	Sep-24	Oct-24	Nov-24	Dec-24	Jan-25	Feb-25	Mar-25	Apr-25	May-25
Baseline	0,23%	23,59%	24,22%	26,63%	29,72%	32,01%	32,33%	35,36%	41,34%	46,59%	56,30%	68,08%	79,47%	83,52%	93,32%	100,00%	100,00%
Percepatan	0,23%	23,59%	24,22%	27,18%	30,26%	32,00%	32,33%	38,40%	43,62%	48,65%	63,45%	88,36%	94,04%	95,62%	98,52%	100,00%	100,00%
Aktual	0,38%	23,82%	26,12%	28,18%	31,02%	33,12%	33,50%	38,90%	43,25%	48,26%	66,56%	89,18%	95,03%	100,00%	100,00%	100,00%	100,00%
Dev Baseline	0,15%	0,24%	1,90%	1,56%	1,30%	1,11%	1,16%	3,53%	1,91%	1,68%	10,26%	21,10%	15,56%	16,48%	6,68%	0,00%	0,00%
Dev Percepatan	0,15%	0,24%	1,90%	1,00%	0,76%	1,12%	1,16%	0,50%	-0,36%	-0,39%	3,11%	0,82%	0,99%	4,38%			



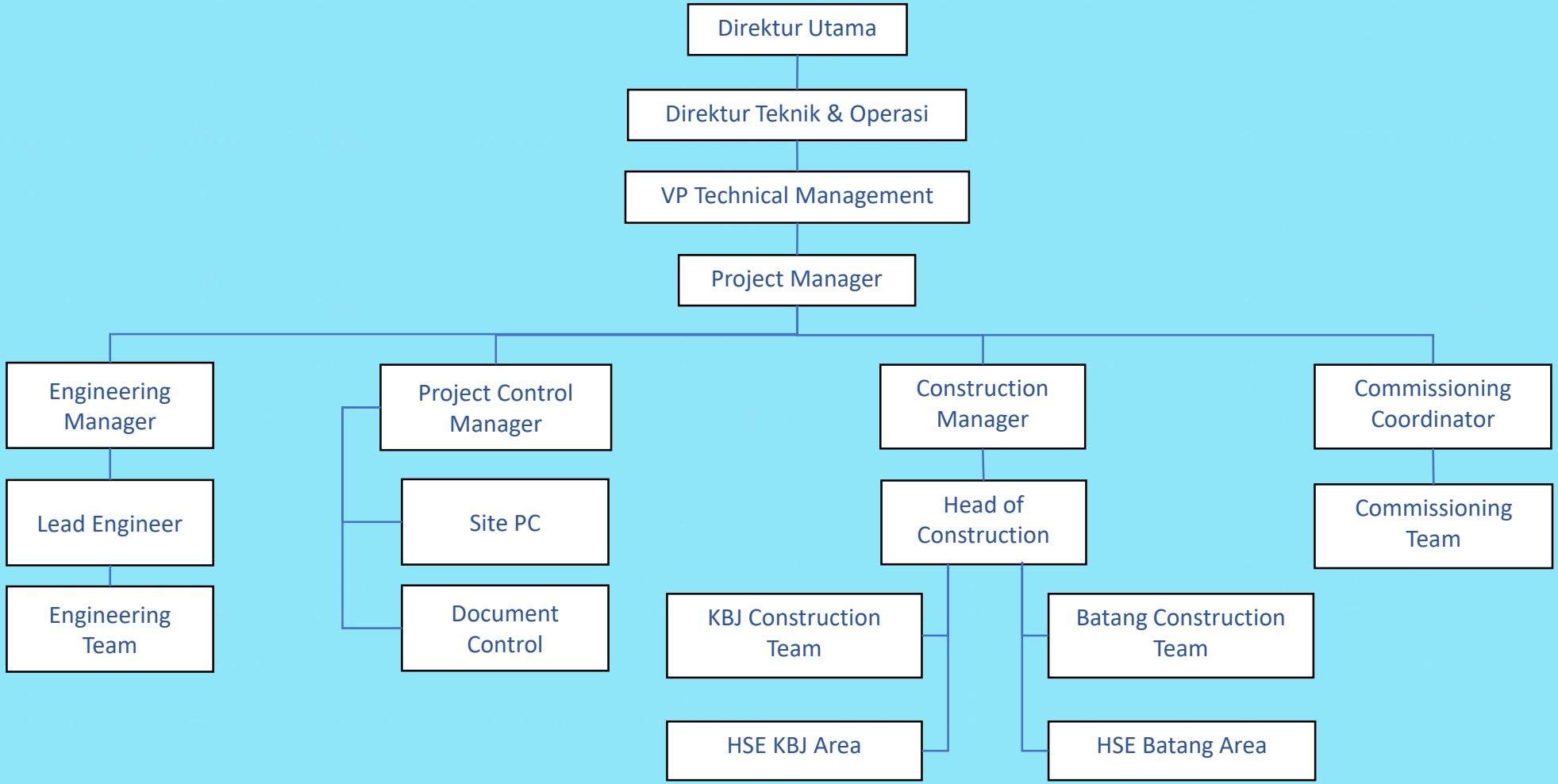
	Jan-24	Feb-24	Mar-24	Apr-24	May-24	Jun-24	Jul-24	Aug-24	Sep-24	Oct-24	Nov-24	Dec-24	Jan-25	Feb-25	Mar-25	Apr-25	May-25
Baseline			0,09%	2,82%	7,94%	15,56%	21,34%	32,07%	39,80%	47,12%	54,81%	61,24%	65,27%	80,60%	88,18%	94,12%	100%
Percepatan			0,12%	6,78%	18,49%	24,89%	33,57%	43,33%	51,06%	62,62%	77,59%	83,57%					
Aktual			0,15%	2,82%	7,07%	15,70%	23,55%	34,48%	41,34%	48,24%	63,24%	82,41%	91,86%	93,14%	93,56%	94,36%	100,00%
Dev Baseline	0	0	0,06%	0,00%	-0,88%	0,14%	2,20%	2,41%	1,55%	1,12%	8,44%	21,17%	26,59%	12,54%	5,38%	0,24%	0,00%
Dev Percepatan	0	0	0,03%	-3,96%	-11,42%	-9,19%	-10,03%	-8,85%	-9,72%	-14,38%	-14,35%	-1,16%	7,87%	-1,89%			



	Jan-24	Feb-24	Mar-24	Apr-24	May-24	Jun-24	Jul-24	Aug-24	Sep-24	Oct-24	Nov-24	Dec-24	Jan-25	Feb-25	Mar-25	Apr-25	May-25
Baseline			0,35%	3,19%	7,94%	13,20%	15,97%	20,70%	23,72%	26,71%	38,16%	51,67%	64,49%	77,49%	88,75%	95,03%	100%
Percepatan			0,36%	3,37%	12,20%	17,20%	21,20%	31,45%	39,39%	50,54%	68,72%	80,01%					
Aktual			0,49%	3,90%	9,89%	14,53%	20,71%	31,15%	45,06%	58,06%	72,39%	86,95%	92,42%	95,93%	97,75%	98,71%	100,00%
Dev Baseline			0,15%	0,71%	1,95%	1,33%	4,74%	10,45%	21,33%	31,35%	34,23%	35,29%	27,94%	18,44%	8,99%	3,68%	0,00%
Dev Percepatan			0,13%	0,53%	-2,31%	-2,66%	-0,50%	-0,30%	5,67%	7,53%	3,67%	6,95%	7,11%	6,07%			

II. STRUKTUR ORGANISASI

STRUKTUR ORGANISASI PROYEK ROKAN 3.0



III. STRATEGI ENGINEERING

- Menempatkan Semua Engineer Owner & EPC dalam satu Gedung
- Konsinyering dokumen Engineering

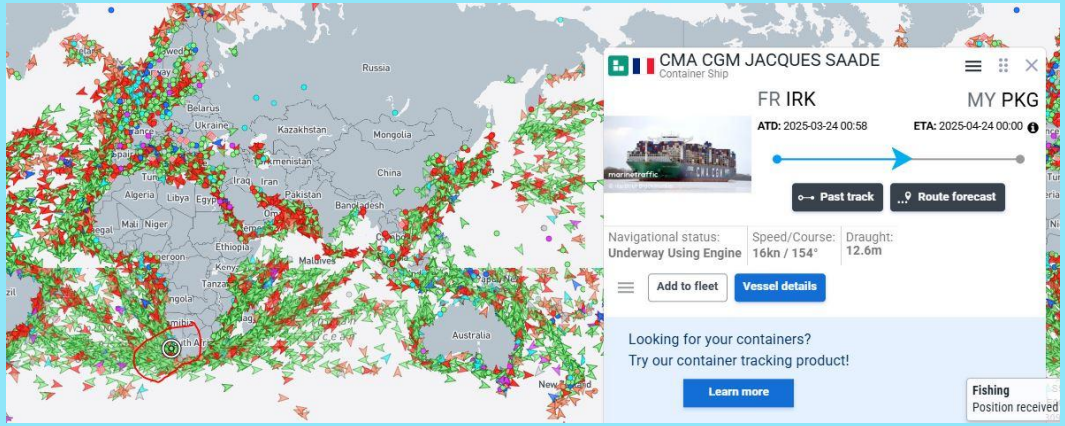
Engineer Pengalaman dan Profesional

Additional Engineer dan Drafter EPC

Prioritas Dokumen untuk Konstruksi dan Procurement

IV. STRATEGI PROCUREMENT

Meeting Khusus Procurement setiap Minggu



Expedite & tracking delivery material secara ketat dan detail

Percepatan PO untuk material-material long lead item

Partial Delivery material sesuai skala prioritas konstruksi

Melakukan koordinasi langsung dengan vendor

IV. STRATEGI PROCUREMENT

Schedule Baseline vs Aktual beberapa material yang mengalami Percepatan

Material	Baseline			Actual			Percepatan (hari)
	PO	MOS	Dur (hari)	PO	MOS	Dur (hari)	
Pig Launcher/Receiver	23-Apr-24	31-Jan-25	283	13-May-24	6-Nov-24	177	106
Instrument Air Compressor & Dryer Package	2-May-24	28-Oct-24	179	25-Aug-24	12-Nov-24	79	100
Overhead Crane	1-May-24	26-Nov-24	209	31-May-24	14-Nov-24	167	42
Diesel Transfer Pump	19-Apr-24	14-Nov-24	209	21-Jun-24	4-Oct-24	105	104
Emergency Diesel Generator Package	4-Apr-24	19-Nov-24	229	7-Apr-24	15-Sep-24	161	68
Pipeline Valves/ Manual Valve	29-Apr-24	25-Jan-25	271	12-Jul-24	20-Nov-24	131	140
Monolithic Insulating Joints (MIJ)	17-Apr-24	29-Oct-24	195	9-Aug-24	9-Dec-24	122	73
MV Switchgear & MCC	17-Apr-24	14-Dec-24	241	16-May-24	18-Oct-24	155	86
LV Switchgear, MCC & Distribution Board	17-Apr-24	14-Dec-24	241	16-May-24	27-Nov-24	195	46
Transformer	23-Apr-24	16-Feb-25	299	7-Jun-24	16-Nov-24	162	137
PLC	10-Apr-24	1-Feb-25	297	7-May-24	2-Dec-24	209	88
Leak Detection System	15-May-24	30-Nov-24	199	28-Jun-24	6-Dec-24	161	38
Fire Detection System	16-May-24	7-Feb-25	267	28-Jun-24	11-Oct-24	105	162

V. STRATEGI CONSTRUCTION

Komitmen Schedule, Target dan Komunikasi

Sosialisasi Target Schedule Harian Konstruksi

Weekly & Monthly Meeting Construction

Meeting Teknis Khusus

Pengawasan Tim Organik Sepanjang Proyek

V. STRATEGI CONSTRUCTION

Perubahan Teknis, Man Power, Tools & Work Hours

Menambah Man Power

Menambah Alat Berat

Shift kerja siang Dan malam

Merubah Metode Konstruksi Pondasi

Mempercepat Pekerjaan Platform untuk akses alat dan material

Merubah Struktur Beton menjadi Baja MCC Room

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3. DOKUMENTASI

DOKUMENTASI PAKET 2

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4. KESIMPULAN

5. KESIMPULAN

Engineering Strategy

Procurement Strategy

Construction Strategy

PROJECT KEY SUCCESS :

KOMUNIKASI

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TERIMA KASIH