

RTRP - TABLE 2.5-1
CONSTRUCTION EQUIPMENT AND WORKFORCE ESTIMATES BY ACTIVITY
CONSTRUCT DOUBLE-CIRCUIT 230KV T/L

WORK ACTIVITY				ACTIVITY ESTIMATES			
Primary Equipment Description	Estimated Horse-Power	Probable Fuel Type	Primary Equipment Quantity	Estimated Crew Workforce	Estimated Schedule (Days)	Estimated Usage (Hrs/Day)	Estimated Activity Value
Survey (1)				4	11		11 Miles
1-Ton Truck, 4x4	300	Gas	2		11	8	1-Mile/Day
Marshalling Yard (2)				4			1 Yard
1-Ton Truck, 4x4	300	Gas	1		Duration of Project	4	
R/T Forklift	125	Diesel	1			4	
Roads & Landing Work (3)				5	26		7.5 Miles & 64 Pads
1-Ton Truck, 4x4	300	Gas	1		26	2	
Backhoe/Front Loader	125	Diesel	1		26	8	
Tracked Dozer	150	Diesel	1		26	8	0.5-Mile/Day &
Motor Grader	250	Diesel	1		26	4	6-Pads/Day
Water Truck	300	Diesel	1		26	8	
Drum Compactor	100	Diesel	1		26	4	
Lowboy Truck/Trailer	450	Diesel	1		26	2	
Guard Structure Installation (4)				6	4		14 Structures
1-Ton Truck, 4x4	300	Gas	2		4	8	
Compressor Trailer	60	Diesel	1		4	4	
Manlift/Bucket Truck	250	Diesel	1		4	4	4-Structures/Day
Boom/Crane Truck	350	Diesel	1		4	8	
Auger Truck	210	Diesel	1		4	4	
Flat Bed Truck	400	Diesel	1		4	8	
LST Foundation Installation (5)				7	36		12 Towers
1-Ton Truck, 4x4	300	Gas	2		36	4	
Boom/Crane Truck	350	Diesel	1		36	4	
Backhoe/Front Loader	125	Diesel	1		36	8	0.33 LSTs/Day (Dbl Crt)
Drill Rig	275	Diesel	1		18	8	
Water Truck	300	Diesel	1		36	8	
Dump Truck	350	Diesel	1		36	8	
Concrete Truck	350	Diesel	3		18	4	
LST Steel Haul (6)				4	6		12 Towers
1-Ton Truck, 4x4	300	Gas	1		6	4	
R/T Forklift	125	Diesel	1		6	8	2 LSTs/Day
Flat Bed Truck	400	Diesel	1		6	8	
LST Steel Assembly (7)				10	48		12 Towers
1-Ton Truck, 4x4	300	Gas	3		48	4	0.25 LSTs/Day (Dbl Crt)
Compressor Trailer	60	Diesel	1		48	8	

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R/T Forklift	125	Diesel	1		48	8	
R/T Crane (M)	215	Diesel	1		48	4	
LST Erection (8)				12	36		12 Towers
1-Ton Truck, 4x4	300	Gas	4		36	4	
Compressor Trailer	60	Diesel	1		36	4	0.33 LSTs/Day
R/T Crane (L)	275	Diesel	1		24	8	(Dbl Crt)
Crane	400	Diesel	1		12	8	
TSP Foundation Installation (9)				6	158		51 TSPs
1-Ton Truck, 4x4	300	Gas	2		158	4	
R/T Crane (M)	215	Diesel	1		158	4	
Backhoe/Front Loader	125	Diesel	1		158	8	
Drill Rig	275	Diesel	1		79	8	0.33 TSPs/Day
Water Truck	300	Diesel	1		158	8	
Dump Truck	350	Diesel	1		158	8	
Concrete Truck	350	Diesel	4		53	4	
TSP Haul (10)				4	17		51 TSPs
1-Ton Truck, 4x4	300	Gas	1		17	4	
R/T Crane (L)	275	Diesel	1		17	8	3 TSPs/Day
Flat Bed Truck	400	Diesel	1		17	8	
TSP Assembly (11)				8	51		51 TSPs
1-Ton Truck, 4x4	300	Gas	2		51	4	
Compressor Trailer	60	Diesel	1		51	8	1 TSP/Day
R/T Forklift	125	Diesel	1		51	8	
R/T Crane (L)	275	Diesel	1		26	4	
TSP Erection (12)				8	102		51 TSPs
1-Ton Truck, 4x4	300	Gas	2		102	4	
Compressor Trailer	60	Diesel	1		102	4	0.5 TSP/Day
Manlift/Bucket Truck	250	Diesel	2		102	8	
Crane	400	Diesel	1		102	8	
Modify Existing LST (13)				10	10		1 Tower
1-Ton Truck, 4x4	300	Gas	3		10	4	
Compressor Trailer	60	Diesel	1		10	4	
Manlift/Bucket Truck	250	Diesel	2		10	8	0.1 LST/Day
R/T Forklift	125	Diesel	1		10	8	
Crane	400	Diesel	1		10	4	
Conductor & OPGW Installation (14)				28	55		16 Circuit Miles
1-Ton Truck, 4x4	300	Gas	6		55	4	

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Manlift/Bucket Truck	250	Diesel	4		55	8	
Boom/Crane Truck	350	Diesel	2		55	8	
R/T Crane (M)	215	Diesel	2		55	4	
Dump/Stake Bed Truck	350	Diesel	1		55	4	
Wire Truck/Trailer	350	Diesel	2		40	8	
Sock Line Puller	300	Diesel	1		20	8	
Bull Wheel Puller	350	Diesel	1		40	8	
Tensioner	350	Diesel	1		55	8	
R/T Forklift	125	Diesel	1		55	8	D/C Bundled
Splicing Rig	300	Diesel	1		20	8	0.3 Crt Mile/Day
Spacing Cart	10	Diesel	6		20	8	
Backhoe/Front Loader	125	Diesel	1		55	4	
Sag Cat w/ Winches	350	Diesel	2		28	2	
Water Truck	300	Diesel	1		55	8	
Lowboy Truck/Trailer	450	Diesel	2		55	2	
Hughes 500E		Jet A	1		20	8	
Helicopter Support Fuel Truck	350	Diesel	1		20	8	
Guard Structure Removal (15)				6	4		14 Structures
1-Ton Truck, 4x4	300	Gas	2		4	8	
Compressor Trailer	60	Diesel	1		4	4	
Manlift/Bucket Truck	250	Diesel	1		4	8	4 Structures/Day
Boom/Crane Truck	350	Diesel	1		4	8	
Flat Bed Truck	400	Diesel	1		4	8	
Vault Installation (16)				20	224		32 Vaults
1-Ton Truck, 4x4	300	Gas	4		224	4	
Backhoe/Front Loader	125	Diesel	2		224	10	
Excavator	250	Diesel	2		112	10	
Dump Truck	350	Diesel	6		112	10	
Water Truck	300	Diesel	2		224	10	2 Vlt/14 Days
Crane (L)	500	Diesel	2		112	10	
Concrete Truck	350	Diesel	12		32	8	
Flat Bed Truck	400	Diesel	6		112	10	
Lowboy Truck/Trailer	450	Diesel	2		112	4	
Duct Bank Installation (17)				20	110		22,000 Trench Feet

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1-Ton Truck, 4x4	300	Gas	4		110	4	
Compressor Trailer	60	Diesel	2		110	10	
Backhoe/Front Loader	125	Diesel	2		110	10	
Excavator	250	Diesel	2		85	10	
Dump Truck	350	Diesel	6		110	10	200'/Day
Pipe Truck/Trailer	275	Diesel	2		110	10	
Water Truck	300	Diesel	2		110	10	
Concrete Truck	350	Diesel	8		85	8	
Lowboy Truck/Trailer	450	Diesel	2		85	4	
Underground Cable Installation (18)				10	96		133,000 Feet
1-Ton Truck, 4x4	300	Gas	2		96	4	
Puller	375	Diesel	1		96	10	
Cable Dolly/Truck	350	Diesel	1		96	10	~1400'/Day
Flat Bed Mat'l Truck	300	Diesel	1		96	10	
Crane (L)	275	Diesel	1		96	10	
R/T Forklift	125	Diesel	1		96	10	
Cable Splicing (19)				16	160		96 Splices
1-Ton Truck, 4x4	300	Gas	4		160	4	
Splicing Truck/Trailer	350	Diesel	2		160	10	6 splices/2 weeks
Flat Bed Mat'l Truck	300	Diesel	2		160	4	
Riser Pole Preparation (20)				5	20		4 Riser Poles
1-Ton Truck, 4x4	300	Gas	2		20	4	1 Pole/Week
Flat Bed Mat'l Truck	300	Diesel	2		20	10	
Cable Terminating (21)				8	120		24 Terminations
1-Ton Truck, 4x4	300	Gas	2		120	4	
Flat Bed Mat'l Truck	300	Diesel	1		120	10	1-Pothead/Week
Crane (L)	275	Diesel	1		120	10	
R/T Forklift	125	Diesel	1		120	10	
Trench Restoration/Paving (22)				6	30		22,000 Linear Feet
1-Ton Truck, 4x4	300	Gas	2		30	4	
Skip Loader	75	Diesel	1		30	10	
Dump Truck	350	Diesel	2		30	10	~800'/Day
Bobcat	60	Diesel	1		30	10	
Compaction Roller	25	Diesel	1		30	10	
Restoration (23)				7	11		11 Miles
1-Ton Truck, 4x4	300	Gas	2		11	4	

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Backhoe/Front Loader	125	Diesel	1		11	8	
Motor Grader	250	Diesel	1		11	4	1 Mile/Day
Water Truck	300	Diesel	1		11	8	
Drum Compactor	100	Diesel	1		11	4	
Lowboy Truck/Trailer	450	Diesel	1		11	2	

Crew Size Assumptions For:

- 1) Survey = one 4-man crew
- 2) Staging/Material Yards = one 4-man crew per yard
- 3) Roads & Pad Work = one 5-man crew
- 4) Guard Structure Installation = one 6-man crew
- 5) LST Foundation Installation = one 7-man crew
- 6) LST Steel Haul = one 4-man crew
- 7) LST Steel Assembly = one 10-man crew
- 8) LST Erection = one 12-man crew
- 9) TSP Foundation Installation = one 6-man crew
- 10) TSP Haul = one 4-man crew
- 11) TSP Assembly = one 8-man crew
- 12) TSP Erection = one 8-man crew
- 13) Modify Existing LST = one 10-man crew
- 14) Install Conductor/OPGW = one 28-man crew
- 15) Guard Structure Removal = one 6-man crew
- 16) Vault Installation = two 10-man crews
- 17) Duct Bank Installation = two 10-man crews
- 18) Underground Cable Installation = one 10-man crew
- 19) Cable Splicing = two 8-man crews
- 20) Riser Pole Preparation = one 5-man crew
- 21) Cable Termination = one 8-man crew
- 22) Trench Restoration/Paving = one 6-man crew
- 23) Restoration = one 7-man crew