SUBSTATION	BREAKERS	FEED TO	IMPULSE TRIP SETTING PRIMARY AMPERES	IMPULSE TRIP SETTING SCREW	IMPULSE TRIP CURRENT TRANSFORMER RATIO	CEX INSTANTANEOUS DISTANCE RELAY OHM UNIT SETTING AT 45° ANGLE PRIMARY OHMS (45°)	SECONDARY OHMS (45°)	TAP SETTING	STARTING UNIT SETTING AT 60° ANGLE PRIMARY OHMS (60°)	SECONDARY OHMS (60°)	REMARKS
(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)	(11)	(12)
BACON HILL	1504	DAVIS	1600	1.6	1000/5A.	4.50	10.8	46%	5.64	13.53	
BACON HILL	1503	DAVIS	1600	1.6	1000/5A.	4.53	10.85	47%	5.66	13.58	
BACON HILL	1502	DAVIS	1600	1.6	1000/5A.	4.48	10.75	47%	5.62	13.50	
BACON HILL	1501	DAVIS	1600	1.6	1000/5A.	4.69	11.26	43%	5.78	13.86	
BACON HILL	1604	PERRYVILLE	1600	1.6	1000/5A.	5.51	13.30	39%	6.40	15.37	
BACON HILL	1603	PERRYVILLE	1600	1.6	1000/5A.	5.32	12.80	38%	6.26	15.02	
BACON HILL	1602	PERRYVILLE	1600	1.6	1000/5A.	5.31	12.79	39%	6.25	15.00	
PERRYVILLE	1604	BACON HILL	1600	1.6	1000/5A.	5.51	13.30	35%	6.40	15.37	
PERRYVILLE	1603	BACON HILL	1600	1.6	1000/5A.	5.32	12.80	39%	6.26	15.02	
PERRYVILLE	1602	BACON HILL	1600	1.6	1000/5A.	5.31	12.79	37%	6.25	15.00	
PERRYVILLE	1601	BACON HILL	1600	1.6	1000/5A.	5.31	12.79	36%	6.25	15.00	
PERRYVILLE	1703	PERRYMAN	1600	1.6	1000/5A.	4.70	11.27	43%	5.79	13.90	
PERRYVILLE	1702	PERRYMAN	1600	1.6	1000/5A.	4.70	11.27	41%	5.79	13.90	
PERRYVILLE	53P2	CONOWINGO	1800	1.8	1000/5A	6.3*	15.1*	77%*	4.03	9.70	*MADE AT 60° ANGLE
PERRYMAN	1703	PERRYVILLE	1600	1.6	1000/5A.	4.70	11.27	43%	5.79	13.90	
PERRYMAN	1702	PERRYVILLE	1600	1.6	1000/5A.	4.70	11.27	41%	5.79	13.90	
PERRYMAN	1803	GUNPOW	1600	1.6	1000/5A.	4.96	11.90	43%	5.98	14.33	
PERRYMAN	1802	GUNPOW	1600	1.6	1000/5A.	4.96	11.90	40%	5.98	14.33	
GUNPOW	1803	PERRYMAN	1600	1.6	1000/5A.	4.96	11.90	41%	5.98	14.33	
GUNPOW	1802	PERRYMAN	1600	1.6	1000/5A.	4.96	11.90	41%	5.98	14.33	
GUNPOW	1904	NORTH POINT	1600	1.6	1000/5A.	5.20	12.50	39%	6.17	14.80	
GUNPOW	1903	NORTH POINT	1600	1.6	1000/5A.	5.04	12.10	38%	6.05	14.50	
GUNPOW	1902	NORTH POINT	1600	1.6	1000/5A.	5.02	12.05	39%	6.03	14.47	
GUNPOW	1901	NORTH POINT	1600	1.6	1000/5A.	5.02	12.05	40%	6.03	14.47	

NOTE (1) FOR SETTING AND CALIBRATION OF IMPULSE TRIP FOR JRA-32 BREAKERS SEE GENERAL ELECTRIC CO. INSTRUCTION BOOK GEI-4603E

NOTE (2) FOR SETTING AND CALIBRATION OF CEX RELAYS SEE GENERAL ELECTRIC CO. INSTRUCTION BOOK GEI-7467 OR 9338

NOTE (3) ALL CURRENT TRANSFORMERS FOR CEX RELAYS ARE 1200/5 RATIO

DATE	ISSUE	APPROVAL	REMARKS
10-17-38	2		CORRECTED FOR HARRISBURG ELECT.
9-30-35	1		ORIGINAL ISSUE

THE PENNSYLVANIA RAILROAD
EASTERN ELECTRIFICATION
CEX AND IMPULSE SETTINGS
GENERAL ELECTRIC CO.
HIGH SPEED TROLLEY BREAKERS
PHILADELPHIA, PENNA.
Nº 22001

CHIEF OF MOTIVE POWER — ELECTRICAL ENGINEER

② 10/7/38 N3