IPC BILL OF MATERIAL INDEX AE-MAG1-91.8

ITEM SECTION	DESCRIPTION
[illegible]	[illegible]
[illegible]	[illegible]
E	[illegible]
[illegible]	[illegible]
[illegible]	Lightning Arrester & Mountings
H	Alarm & Signal Equipment
K	Insulated Cable
L	Bare Conductor
M	Conductor Fittings
N	Insulator Material
O	Insulator Hardware
P	Conduit & Fittings
Q	Heater
R	Lighting Equipment
S	Grounding System
T	Miscellaneous
U	Carrier Current Equipment
V	Substation Structure
X	Contracts

ABBREVIATED DESCRIPTION IS USED ON B.M. RECORD. REFER TO REQUISITION FOR DETAILS OF DESCRIPTION AND [illegible]

AE-M[illegible]

Form 194-14
8-64

BILL OF MATERIAL

AE-MAGI-91.8

DESCRIPTION

[illegible] POWER COMPANY
ENG DLR WO NO [illegible]
SHEET NO SUBSEC 1
LOCATION Texas Substation

STOCK CODE	QUAN	DESCRIPTION	REQ DATE & NO.	FOR [illegible] ORDER NO. SUPPLIER	DELIVERY DATE	DELIVERY REC'D DATE
P-18	1 EA	Cover Blank Metal, 2" Galv	9/15/72 3342	67-3-42 [illegible]		
P-19	1 EA	Gasket Conduit, 2"	"	"		

BIL. OF MATERIAL AE-MAG1-91.8

D L 2 LD.	DISTRIBUTOR [illegible], [illegible]	[illegible]	4 30 [illegible]
	SINGLE BUSHING, [illegible]		
	[illegible]		

BILL OF MATERIAL AE-MAGI-91.8

DESCRIPTION

ILLINOIS POWER COMPANY
ENG DLR W.O. NO [illegible]
SHEET NO _____ S/MSEC F
LOCATION Times Substation

STOCK CODE	QUAN	DESCRIPTION	REQ DATE & No	PURCHASE ORDER No SUPPLIER	DELIVERY STATUS	DELIVERY REC'D DATE
F-1	1EA.	Panel Enclosure, Steel Nema Type 12, Similar To Hoffman Cat # A-483[illegible] Except With Swinging Panel	[illegible] 3310	[illegible]		
F-2	6EA	Relay, Directional Overcurrent, 2-6 A time unit SPST-SE contacts type "CR-9"	[illegible] 3351	[illegible] Westinghouse		
F-3	1EA	Breaker, Oil Circuit, 14.9 KV, [illegible]	[illegible] 3353	Decatur	COMPLETE	5-1-73
F-4	1EA	Switch, Air Break, 14.4 KV, [illegible] amp, 2PST, 61,000 amp, T.R. [illegible] Delta Star "MK-VGA"	[illegible]	[illegible]		
F-5	6EA	Switch, Overcurrent [illegible] amp, SPST 61,000 amp, Delta Star type "B-2M"	"	"		
F-16	1EA	Overcurrent Relay 4-15 A Very Inverse Time, Type "CO", SPST.	[illegible] 3336	Belleville	COMPLETE	5-21-73
F-7	1EA.	Fuse Mounting 200 E Amps, 15 Kv, SEC Type SM For SM-4 Refill Cat # 190502R1	[illegible] 3337	Decatur	COMPLETE	[illegible]
F-8	1EA	Fuse Holder, Disconnect Type 200 E. Amps, 14.9 Kv, SEC Type SM-4, Cat # [illegible]	"	"	COMPLETE	2/3/74
F-9	2EA	Load Center, 120/240 V AC, 125 A Main [illegible] Bucket 2 - 2P - 240V AC - 80A. 4 - 2P - 240V AC - 20A.	[illegible] 3338	[illegible]		

BILL OF MATERIAL AE-MAG1-91.8

DESCRIPTION

ILLINOIS POWER COMPANY
ENG DLR W.O. NO. 26227
SHEET NO. B/M SEC. F
LOCATION Texas Substation

STOCK CODE	QUAN.	DESCRIPTION	REQ DATE & No.	PURCHASE ORDER No. SUPPLIER	DELIVERY STATUS	DELIVERY REQ'D DATE
F-10	1 EA	Safety Switch, 60 Amps, 240 V AC, DPST, 3 Wire Sq D #[illegible]	9/21/72 3339	B 84342 [illegible]		
F-11	1 EA	Plug Receptacle & Housing, 3 Wire, 2 Pole, Grounding Type, Crouse Hinds # DS-99	"	"		
F-12	3 ea	Lincoln Ampere Demand Meter [illegible]	[illegible] 408	B 93329 [illegible]		
F-13	1 ea	Cutout, Cartridge fuse, 1 to 30 amp, 250v, TR, main porcelain	1-15-73 268	Belleville	COMPLETE	3-29-73
F-14	6 ea	Fuse, cartridge, non-renewable, 6 amp, 250v, ferrule type	"	Belleville	COMPLETE	3-29-73
F-15	4 ea	Refill, fuse 5E amp, 15Kv, type SM-4, std TCC 153-4	1-18-73 269	B 94869 [illegible]		
F-16	2 ea	Lincoln Ampere Demand Meter, 3 elements, 5 amp, semi flush mounting	3-20-73 876	C 00381 [illegible]		
F-17	3 ea.	Test switch, 3 pair current front connected	3-20-73 872	Des Mtr Stup	COMPLETE	4-3-73

Form 194-14

BILL OF MATERIAL AE-MAG1-9L8

DESCRIPTION

ILLINOIS POWER COMPANY
ENG DLR W.O. No 26227
SHEET No D/MSEC G
LOCATION Texas Sub Station

STOCK CODE	QUAN.	DESCRIPTION	REQ. DATE & No.	PURCHASE ORDER No. SUPPLIER	DELIVERY STATUS	DELIVERY REC'D DATE
B-1	6 EA	Lightning Arrester, 4 KV Intermediate G.E. #9L12HGC009	4/20/73 3340	Belleville	COMPLETE	3-9-73

BILL OF MATERIAL AE-MAG1-91.8

DESCRIPTION

ILLINOIS POWER COMPANY
ENG DLK
SHEET NO
LOCATION TEXAS SUBSTATION

STOCK CODE	QUAN.	DESCRIPTION	REQ DATE & No.	PURCHASE ORDER No. SUPPLIER	DELIVERY STATUS	DELIVERY REC'D DATE
K-1	80'	Copper Wire, #6 STR, 600 Volts, TW, Black	9/15/72 3341	Mt. Vernon	COMPLETE	9/22/72
K-2	40'	Copper Wire, #6 Str, 600 Volts, TW, White	"	Belleville	COMPLETE	3-9-73
K-3	250'	Wire Copper Switchboard, No. 12 str, 600 volts vulkene insulated gray flame proof	1-18-73 271	Decatur	COMPLETE	2-6-73
K-4	150'	Control Cable #19/22 4 cond 600V polyethylene insulation, PVC jacket	1-18-73 270	MH Danon	COMPLETE	2-16-73
K-5	75'	Control Cable, No 12, 7 cond, 600V poly ethylene insulation, PVC jacket	"	MH Danon	COMPLETE	2-16-73

BILL OF MATERIAL AE-MAG1-91.8

DESCRIPTION

ILLINOIS POWER COMPANY
ENG. DLR H.O. NO. 26727
SHEET NO. B/M SEC. 6
LOCATION Texas Substation

STOCK CODE	QUAN.	DESCRIPTION	REQ. DATE	PURCHASE ORDER NO. SUPPLIER	DELIVERY STATUS	DELIVERY REQ'D DATE
L-1	60'	TUBE, ALUM. BUS, 1½" IPS STD	9/12/72 3342	B26137 WHEELER BRASS		
L-2	125#	COPPER WIRE, 500 MCM STR BARE MHD	9/12/72 3343	DECATUR	COMPLETE	2-6-73
L-3	10#	COPPER WIRE, 4/0 STR, BARE, HD	"	CENTRALIA	COMPLETE	[illegible]
L-4	7#	COPPER WIRE, #2 SOL, BARE, HD	"	MT. VERNON	COMPLETE	9/25/72
L-5	60#	COPPER WIRE, 2/0 SOL, BARE, HD	9/12/72 3344	[illegible]	COMPLETE	3-9-73

BILL OF MATERIAL AE-MAG1-9L8

DESCRIPTION

ILLINOIS POWER COMPANY
ENG. DLR W.O. NO. 26727
SHEET NO. SYMBOL M
LOCATION TEXAS SUBSTATION

STOCK CODE	QUAN.	DESCRIPTION	REQ. DATE	PURCHASE ORDER NO. SUPPLIER	DELIVERY STATUS	DELIVERY REC'D DATE
M-1	2EA	TEE CONNECTOR, ALUM 1½" IPS ALUM TUBING RUN, [illegible] COPPER TAP, TYPE FTU, DELTA STAR CAT #FTU-1151	7/21/72 3345	[illegible] DELTA STAR		
M-2	3EA	TEE CONNECTOR 300 TO 500 MCM RUN, 6 TO 2/0 TAP, DELTA STAR # TU-30	7/21/72 3346	DECATUR	COMPLETE	2-6-73
M-3	3EA	TEE CONNECTOR 1½ IPS ALUM TUBING RUN & TAP, BURNDY #NNT17H1A		[illegible]	COMPLETE	[illegible]
M-4	2EA	TERMINAL LUG, 1 TO 4/0 CABLE TO TWO HOLE FLAT, 400 AMPS, TYPE FU-26X2 DELTA STAR # FU-111		SPARTA	COMPLETE	11/21/72
M-5	3EA	WEDGE TYPE COMPRESSION TAP CONNECTOR 4/0 STR LARGE WIRE, 2/0 SOL SMALL WIRE		URBANA	[illegible]	9/23/72
M-6	8EA	PARALLEL GROOVE CLAMP ONE BOLT, 6 STR TO 4/0 STR CABLE RANGE BOTH SIDES, SOUTHERN STATES # PL-50		DECATUR	COMPLETE	2-6-73
M-7	60ea	Lug, Terminal, No 9 str. to No 10 screw size one hole flat compression hylug, type YAV	7-21-73 2712	Belleville	COMPLETE	3-29-73
M-8	150ea	Terminal, Compression, ring torque, No 12-10 wire range, No 10 stud size, vinyl, pre insulated diamond grip	7-18-73 2712	Decatur	COMPLETE	2-6-73

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BILL OF MATERIAL AE-MAG1-968

DESCRIPTION

ILLINOIS POWER COMPANY
ENG DLR W.O. NO. 26727
SHEET NO. SAMSEC P
LOCATION Texas Substation

STOCK CODE	QUAN.	DESCRIPTION	REQ DATE #No.	PURCHASE ORDER No. SUPPLIER	DELIVERY STATUS	DELIVERY REC'D DATE
P-1	8 EA	Conduit Bushing 1" Galv	[illegible] 3339	884342 [illegible]		
P-2	6 EA	Conduit Locknut, Rigid, 1" Galv	"	"		
P-3	1 EA	Threaded Condulet, 1", Type FS Single Gang	"	"		
P-4	1 EA	Gasket, 1" FS Box Graybar Gage 425	"	"		
P-5	2 EA	Conduit Nipple, Galv, 1" x 4"				
P-6	20'	Conduit, Rigid, 1¼" Galv	[illegible] 3347	Central [illegible]	Complete	[illegible]
P-7	2 EA	Conduit Bushing, 1¼" Galv		[illegible]		
P-8	4 EA	Conduit Locknut, Rigid, 1¼" Galv				
P-9	4 EA	Threaded Condulet, Rigid, 1¼" Galv	"	"		
P-10	4 EA	Cover Blank Metal, 1¼" Galv Condulet	"	"		
P-11	4 EA	Gasket, Condulet, 1¼"	"			
P-12	4 EA	Conduit Clamp, 1¼" One Screw Nail	"	"		
P-13	2 EA	Cap, Entrance 1¼"	"			
P-14	10'	Conduit, Rigid, 2" Galv	[illegible] 3342	[illegible]	[illegible]	[illegible]
P-15	4 EA	Conduit Bushing, 2" Galv	"	[illegible]		
P-16	6 EA	Conduit Locknut, Rigid, 2" Galv				
P-17	1 EA	Threaded Condulet, 2" Type "LB" Galv				

```
*****************************************************************************
          Lines Data File:  i:\uoe-control\section\aspenlc\ipconst.lnn
      Construction Library:  i:\uoe-control\section\aspenlc\ipconst.lcn

  System MVA Base = 100.   Units are English.   Frequency =60 Hertz

     File contains 494 lines with a total of 1407 sections

=============================================================================
  Line  "L3452"  from bus  ""  to bus "":

     34.5 kV       3 Phases       3 Sections       19.56 Miles

  ____Section_______Miles_________Construction____Circuit_____Connection____
   SBel/101         4.4700          L3452 (4)      ph  L3452(4)      0
   101/321         12.7600          L3452 (1)a     ph L3452(1)a      0
   321/DutchHil     2.3300          L3452 (1)b     ph L3452(1)b

-----------------------------------------------------------------------------
      Section  "SBel/101"  of line  " L3452":   4.47 Miles

        _____________Positive Sequence Self Parameters_____________
                          Section Impedance
              (Ohms)                              (per unit)
          0.54113   +j  2.8827                0.045464  +j  0.24219

              Section Susceptance                Section Charging
            (Mhos)       (per unit)                  (MVAR)
         +3.0276e-005   +0.00036035                +0.036035

        ______________Zero Sequence Self Parameters______________
                          Section Impedance
              (Ohms)                              (per unit)
          2.3593    +j  8.5791                0.19822   +j  0.72078

              Section Susceptance                Section Charging
            (Mhos)       (per unit)                  (MVAR)
         +1.5641e-005   +0.00018616                +0.018616

-----------------------------------------------------------------------------
      Section  "101/321"  of line  " L3452":   12.76 Miles

        _____________Positive Sequence Self Parameters_____________
                          Section Impedance
              (Ohms)                              (per unit)
          3.5592    +j  9.2186                0.29903   +j  0.77451

              Section Susceptance                Section Charging
            (Mhos)       (per unit)                  (MVAR)
         +7.6484e-005   +0.00091035                +0.091035

        ______________Zero Sequence Self Parameters______________
                          Section Impedance
              (Ohms)                              (per unit)
          9.8399    +j  29.472                0.82671   +j  2.4761

              Section Susceptance                Section Charging
            (Mhos)       (per unit)                  (MVAR)
         +4.6029e-005   +0.00054786                +0.054786

-----------------------------------------------------------------------------
      Section  "321/DutchHil"  of line  " L3452":   2.33 Miles

        _____________Positive Sequence Self Parameters_____________
                          Section Impedance
              (Ohms)                              (per unit)
          0.28087   +j  1.5699                0.023598  +j  0.13189

              Section Susceptance                Section Charging
            (Mhos)       (per unit)                  (MVAR)
         +1.5058e-005   +0.00017923                +0.017923

        ______________Zero Sequence Self Parameters______________
```

Section Impedance

(Ohms)			(per unit)		
1.2691	+j	4.2412	0.10663	+j	0.35633

Section Susceptance (Mhos)	Section Susceptance (per unit)	Section Charging (MVAR)
+8.849Be-006	+0.00010533	+0.010533

Positive Sequence Self Parameters

Line Impedance

(Ohms)			(per unit)		
4.3812	+j	13.671	0.36809	+j	1.1486

Line Susceptance (Mhos)	Line Susceptance (per unit)	Line Charging (MVAR)
+0.00012182	+0.0014499	+0.14499

Zero Sequence Self Parameters

Line Impedance

(Ohms)			(per unit)		
13.468	+j	42.292	1.1316	+j	3.5532

Line Susceptance (Mhos)	Line Susceptance (per unit)	Line Charging (MVAR)
+7.0519e-005	+0.00083936	+0.083936

****