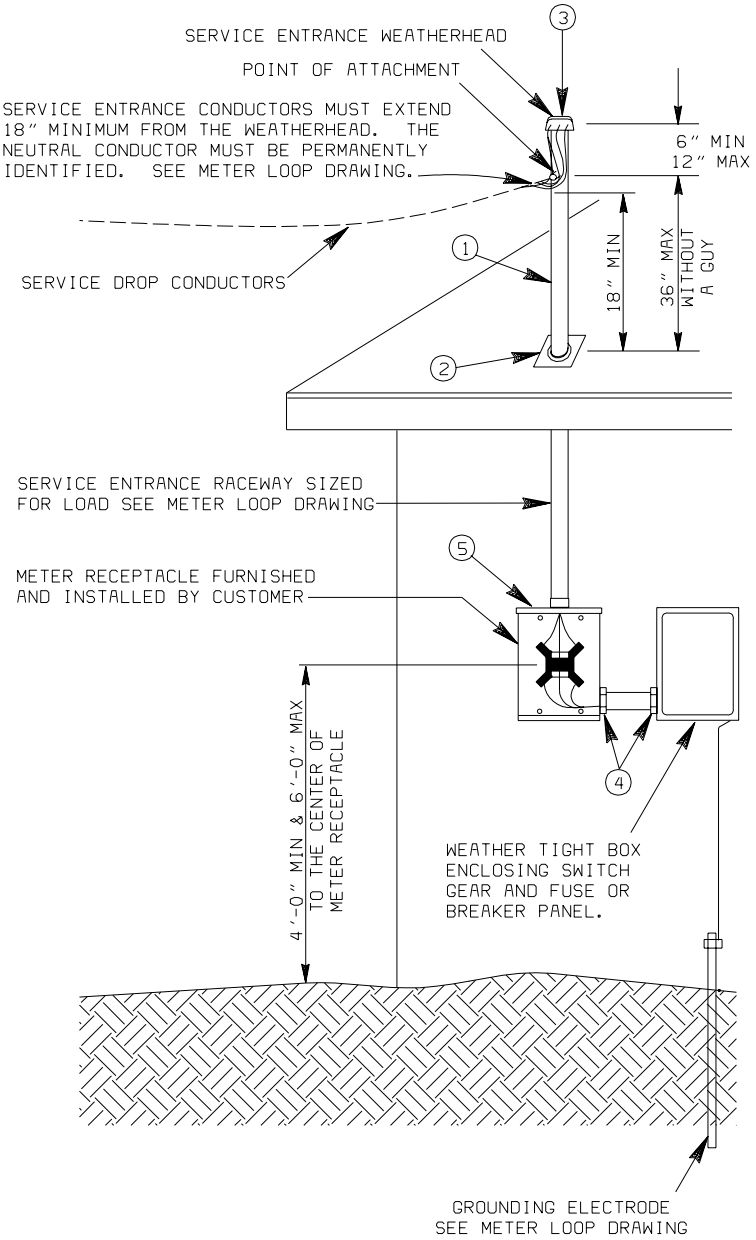
SERVICE MAST INSTALLATION
3–WIRE, SINGLE PHASE, 120 /240 VOLT, FOR 200 AMPERES OR LESS



MINIMUM CLEARANCES FOR OVERHEAD CONDUCTORS*

SERVICE DROP CONDUCTORS SHALL HAVE THE FOLLOWING MINIMUM CLEARANCES TO GROUND ALONG ANY PART OF THE SERVICE DROP INCLUDING THE DRIP LOOP:

CLEARANCE TO GROUND	SERVICE CONDITION
12 FEET	ABOVE AREAS ACCESSIBLE TO PEDESTRIANS ONLY, IF MORE THAN 10 FEET FROM SWIMMING POOLS, SWIMMING AREAS OR DIVING PLATFORMS.
15 FEET	ABOVE FINISHED GRADE, SIDEWALKS, RESIDENTIAL DRIVEWAYS OR OTHER AREAS WHERE TRUCK TRAFFIC IS NOT ENCOUNTERED. TRUCKS SHALL BE DEFINED AS ANY VEHICLE EXCEEDING 8 FEET IN HEIGHT.
16 FEET	OVER NON-RESIDENTIAL DRIVEWAYS, PARKING LOTS, ALLEYS OR OTHER AREAS SUBJECT TO TRUCK TRAFFIC.
22 FEET	OVER PUBLIC STREETS AND ROADS.

SERVICE DROP CONDUCTORS SHALL HAVE THE FOLLOWING MINIMUM CLEARANCES AT ANY POINT OF THE DROP CONDUCTORS, INCLUDING THE DRIP LOOP, IF THEY PASS OVER A NON-ENCLOSED SWIMMING POOL OR THE SURROUNDING AREA WITHIN 10 FEET FROM THE EDGE OF A NON-ENCLOSED SWIMMING POOL:

CLEARANCE	SERVICE CONDITION
14 FEET 6 INCHES	IN ANY DIRECTION FROM AN OBSERVATION STAND, DIVING TOWER OR PLATFORM.
22 FEET 6 INCHES	IN ANY DIRECTION FROM WATER LEVEL, EDGE OF WATER SURFACE, DIVING PLATFORM BASE OR PERMANENTLY ANCHORED RAFT.

THE WEATHERHEAD SHALL NOT BE MORE THAN 25 FEET ABOVE GROUND UNLESS GREATER HEIGHT IS REQUIRED TO MAINTAIN PROPER CLEARANCES AND IS APPROVED BY CENTERPOINT ENERGY DISTRICT OPERATION. SERVICE DROPS MUST BE FREE OF CONTACT WITH TREES. THE CUSTOMER SHALL TRIM ALL TREES AS REQUIRED TO PROVIDE NECESSARY CLEARANCE. UNDER NO CIRCUMSTANCES WILL CENTERPOINT ENERGY CO. ATTACH ITS SERVICE DROP TO AN INTERMEDIATE STRUCTURE INSTALLED BY THE CUSTOMER BETWEEN CENTERPOINT ENERGY DISTRIBUTION LINE AND THE CUSTOMER'S SERVICE OUTLET.

(1) A SERVICE MAST IS REQUIRED IF CLEARANCES CANNOT BE MET BY ATTACHING THE SERVICE DROP DIRECTLY TO THE BUILDING. THE SERVICE MAST SHALL BE INSTALLED AND MAINTAINED AT THE CUSTOMER'S EXPENSE. EITHER 2" OR LARGER GALVANIZED IRON CONDUIT, 2" OR LARGER INTERMEDIATE METAL CONDUIT, OR 3" OR LARGER RIGID ALUMINUM CONDUIT SHALL BE USED IN THE INSTALLATION OF SERVICE MAST. IF A SERVICE MAST WILL NOT HAVE SUFFICIENT STRENGTH TO PROPERLY SUPPORT, THE SERVICE DROP, A BRACKET OR GUY WILL BE REQUIRED. THE COMPANY RESERVES THE RIGHT TO DECLINE TO CONNECT ITS SERVICE DROP TO AN EXTENSION SUPPORT WHICH IN ITS JUDGEMENT, CONSTITUTES A HAZARD TO LIFE OR PROPERTY.

(2) IT IS TO THE CUSTOMER'S ADVANTAGE TO INSTALL THE SERVICE DROP SUPPORT AS SECURELY AS POSSIBLE TO MINIMIZE DAMAGE TO THE INSTALLATION FROM STORMS, FALLING BRANCHES AND OTHER HAZARDS.

(3) THE SERVICE ENTRANCE CONDUCTOR'S SHALL BE PROVIDED WITH WEATHERPROOF ENTRANCE FITTINGS WHERE THEY EXTEND FROM THE CUSTOMER'S CONDUIT OR RACEWAY.

(4) WEATHERPROOF CONNECTIONS MUST BE USED BETWEEN THE CUSTOMER'S CONDUIT OR RACEWAY AND METER SOCKET BASE AND FUSE OR BREAKER BOX.

(5) EACH METER SOCKET SHALL BE CLEARLY AND PERMANENTLY MARKED BY THE PERSON INSTALLING IT TO SHOW ADDRESS TO BE SERVED BY THE METER.

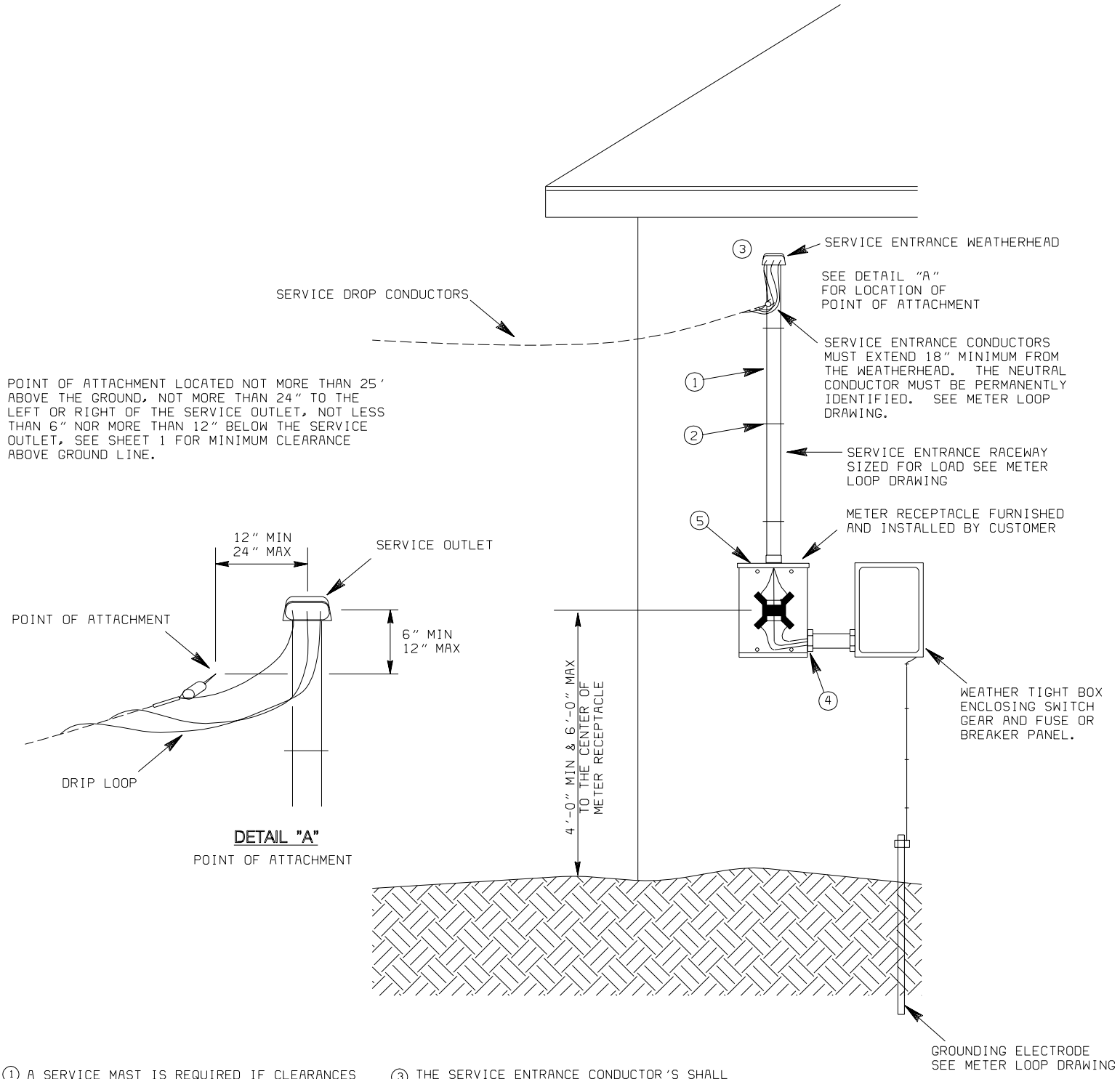
NO.	DATE	REVISION	BY	CH	APP.
1	10-19-05	REVISED PER NEW CODES & TARIFF	LRM KTN	JCD/ KTN	LHH

RESIDENTIAL OVERHEAD SERVICE ARRANGEMENT
SERVICE MAST INSTALLATION

CenterPoint Energy
HOUSTON, TEXAS

DRAWN	11-14-85	D.R.H.	SECTION	SUB-SECTION
CHECKED	11-15-85	JCD RCB	SHEET 1 OF 4 SHEETS	
APPROVED	11-15-85	E.E.GRUCHALLA	DRAWING NUMBER	006268 11

OVERHEAD SERVICE ATTACHED DIRECT TO BUIDING
3 WIRE SINGLE PHASE 120/240 VOLT
FOR 200 AMPERES OR LESS



DETAIL "A"
POINT OF ATTACHMENT

(1) A SERVICE MAST IS REQUIRED IF CLEARANCES CANNOT BE MET BY ATTACHING THE SERVICE DROP DIRECTLY TO THE BUILDING. WHERE THE BUILDING IS OF WOOD CONSTRUCTION AND CAPABLE OF WITHSTANDING A PULL OF 300 POUNDS, A SCREW HOOK FURNISHED AND INSTALLED BY CENTERPOINT ENERGY CO. SHALL BE USED TO ANCHOR THE SERVICE DROP. WHEN A SCREW IS NOT PRACTICAL, A 5/8" GALVANIZED BOLT (FURNISHED BY CENTERPOINT ENERGY CO. UPON REQUEST AND INSTALLED BY THE CUSTOMER) OF SUFFICIENT LENGTH SUCH THAT THE THREADED END OF THE BOLT EXTENDS 2" BEYOND THE SURFACE OF THE WALL AND SO INSTALLED THAT IT IS CAPABLE OF WITHSTANDING A 300 POUND PULL, SHALL BE USED TO ANCHOR THE SERVICE DROP.

(2) IT IS TO THE CUSTOMER'S ADVANTAGE TO INSTALL THE SERVICE DROP SUPPORT AS SECURELY AS POSSIBLE TO MINIMIZE DAMAGE TO THE INSTALLATION FROM STORMS, FALLING BRANCHES AND OTHER HAZARDS.

(3) THE SERVICE ENTRANCE CONDUCTOR'S SHALL BE PROVIDED WITH WEATHERPROOF ENTRANCE FITTINGS WHERE THEY EXTEND FROM THE CUSTOMER'S CONDUIT OR RACEWAY.

(4) WEATHERPROOF CONNECTIONS MUST BE USED BETWEEN THE CUSTOMER'S CONDUIT OR RACEWAY AND METER SOCKET BASE AND FUSE OR BREAKER BOX.

(5) EACH METER SOCKET SHALL BE CLEARLY AND PERMANENTLY MARKED BY THE PERSON INSTALLING IT TO SHOW ADDRESS TO BE SERVED BY THE METER.

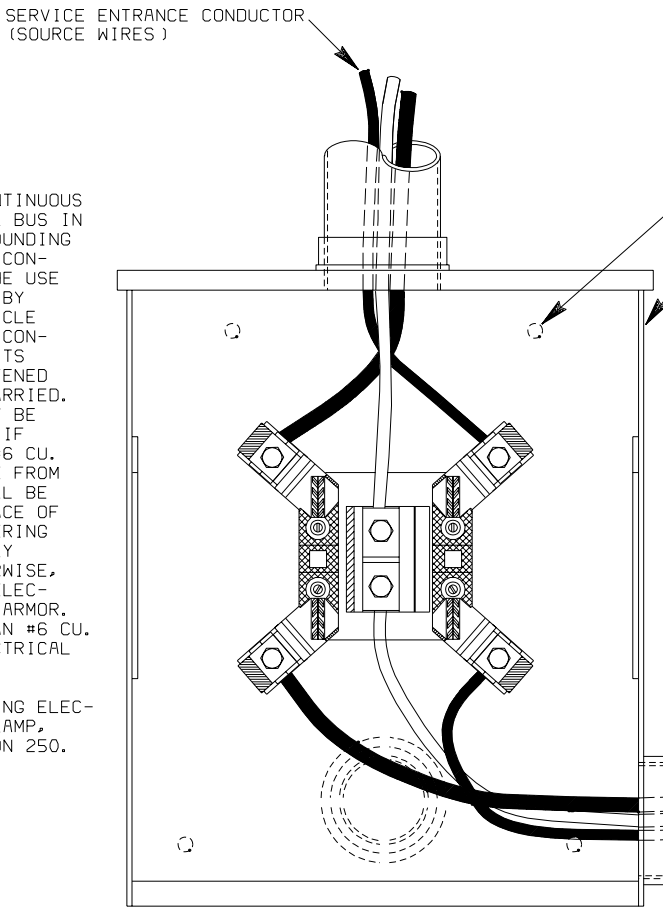
NO.	DATE	REVISION	BY	CH	APP.
1	10-19-05	REVISED PER NEW CODES & TARIFF	LRM KTN	JCD/ KTN	LHH

RESIDENTIAL OVERHEAD SERVICE ARRANGEMENT
SERVICE ATTACHED TO A BUILDING

CenterPoint Energy
HOUSTON, TEXAS

DRAWN	11-14-85	D.R.H.	SECTION	SUB-SECTION	
CHECKED	11-15-85	JCD RCB	SHEET 2 OF 4 SHEETS		
APPROVED	11-15-85	E.E.GRUCHALLA	DRAWING NUMBER	006268	11

METER LOOP FOR SOCKET METERS
(SINGLE METER INSTALLATIONS ONLY)
3 WIRE SINGLE PHASE 120/240 VOLT OVERHEAD SERVICE
FOR 200 AMPERES OR LESS



SOURCE AND LOAD CONDUCTORS

THE CUSTOMER MAY MAKE THE CONNECTIONS WITHIN THE METER CAN (NOTE THE SOURCE CONDUCTORS MUST GO TO THE TOP TERMINALS), OR THE CUSTOMER MAY LEAVE SUFFICIENT CONDUCTOR FOR CENTERPOINT ENERGY TO MAKE THE CONNECTIONS. ALL CUSTOMER MADE CONNECTIONS WITHIN THE METER CAN WILL BE CHECKED BY CENTERPOINT ENERGY. THE CUSTOMER SHALL FURNISH AND INSTALL THE SERVICE ENTRANCE CONDUCTORS IN ACCORDANCE WITH RESIDENTIAL UNDERGROUND SERVICE ARRANGEMENTS. CENTERPOINT ENERGY SHALL MAKE ALL CONNECTIONS BETWEEN THE CUSTOMER'S SERVICE CONDUCTORS AND COMPANY OWNED CONDUCTORS AND EQUIPMENT.

GROUNDING CONDUCTOR

GROUNDING CONDUCTOR SHALL BE CONTINUOUS WITHOUT SPLICES FROM THE NEUTRAL BUS IN THE SERVICE EQUIPMENT TO THE GROUNDING ELECTRODE. INSULATED GROUNDING CONDUCTORS MUST BE IDENTIFIED BY THE USE OF WHITE OR GREY INSULATION, OR BY OTHER SUITABLE METHODS (SEE ARTICLE 200-6 N.E.C. *). THE GROUNDING CONDUCTOR, MINIMUM SIZE #8 CU. OR ITS ENCLOSURE SHALL BE SECURELY FASTENED TO THE SURFACE ON WHICH IT IS CARRIED. A #4 CU. OR LARGER CONDUCTOR MAY BE EXPOSED, BUT SHALL BE PROTECTED IF EXPOSED TO PHYSICAL DAMAGE. A #6 CU. GROUNDING CONDUCTOR THAT IS FREE FROM EXPOSURE TO PHYSICAL DAMAGE SHALL BE PERMITTED TO RUN ALONG THE SURFACE OF THE STRUCTURE WITHOUT METAL COVERING OR PROTECTION WHERE IT IS RIGIDLY STAPLED TO THE STRUCTURE. OTHERWISE, IT SHALL BE PLACED IN CONDUIT, ELECTRICAL METALLIC TUBING OR CABLE ARMOR. GROUNDING CONDUCTORS SMALLER THAN #6 CU. SHALL BE PLACED IN CONDUIT, ELECTRICAL METALLIC TUBING OR CABLE ARMOR.

THE GROUNDING ELECTRODE, GROUNDING ELECTRODE CONDUCTOR AND GROUNDING CLAMP, SHALL COMPLY WITH N.E.C.* SECTION 250.

METER SOCKET BASE

FURNISHED AND INSTALLED BY CUSTOMER WITH CENTER NOT LESS THAN 4' OR MORE THAN 6' ABOVE GROUND FOR A 120/240 VOLT 200 AMPERE OR SMALLER SERVICE. THE METER SOCKET BASE IS TO BE INSTALLED OUTDOOR.

SERVICE RACEWAY TO DISTRIBUTION LOAD CENTER

TO SERVICE ENTRANCE DISCONNECT AND OVERCURRENT PROTECTION, EXTERNALLY AND MANUALLY OPERABLE WITH OVERCURRENT PROTECTION (FUSING OR BREAKER SETTING) NOT GREATER THAN CAPACITY OF SERVICE ENTRANCE CONDUCTORS. MAY BE LOCATED INSIDE OR OUTSIDE (EITHER ON THE BUILDING OR ON A POLE) IF RAINTIGHT. (KNOCKOUT ON SIDE, BOTTOM OR BACK OF THE METER CAN MAY BE USED FOR THIS CONNECTION).

SERVICE RACEWAYS

SERVICE ENTRANCE CONDUIT MAY BE SCHEDULE 40 OR GREATER RIGID NONMETALLIC CONDUIT, RIGID METAL CONDUIT OR INTERMEDIATE METAL CONDUIT EXCEPT WHERE SUBJECT TO PHYSICAL DAMAGE, SUCH AS NEAR A PARKING AREA, DRIVEWAY OR GATE. ONLY SCHEDULE 80 NONMETALLIC CONDUIT, RIGID METAL CONDUIT, OR INTERMEDIATE METAL CONDUIT MAY BE USED FOR SERVICE ENTRANCE CONDUIT WHERE SUBJECT TO PHYSICAL DAMAGE.

WIRING SHALL CONFORM TO THE NATIONAL ELECTRIC CODE (LATEST REVISION), AND LOCAL ORDINANCES.

* NATIONAL ELECTRIC CODE, LATEST REVISION

NO.	DATE	REVISION	BY	CH	APP.
1	10-19-05	REVISED PER NEW CODES & TARIFF	LRM KTN	JCD/ KTN	LHH

RESIDENTIAL OVERHEAD SERVICE ARRANGEMENT
METER LOOP FOR 200A OR LESS

CenterPoint Energy
HOUSTON, TEXAS

DRAWN	11-14-85	D.R.H.	SECTION	SUB-SECTION
CHECKED	11-15-85	JCD RCB	SHEET 3 OF 4 SHEETS	
APPROVED	11-15-85	E.E.GRUCHALLA	DRAWING NUMBER	006268 11

SERVICE MAST INSTALLATIONS AND SERVICES ATTACHED DIRECTLY TO BUILDING
3 WIRE, SINGLE PHASE 120 / 240 VOLT, FOR 200 AMPERES OR LESS

SERVICE DROP

CENTERPOINT ENERGY WILL INSTALL ONE SERVICE DROP FROM THE COMPANY'S DISTRIBUTION LINES TO THE CUSTOMER'S POINT OF ATTACHMENT. THE MAXIMUM LENGTH OF SERVICE DROP, WHICH CENTERPOINT ENERGY WILL INSTALL, WILL BE GOVERNED BY THE LOAD AND TYPE OF SERVICE. ALLOWABLE VOLTAGE DROP AND MECHANICAL FACTORS, DETERMINED BY THE SIZE AND NUMBER OF WIRES OF A SERVICE DROP, IMPOSE LIMITS ON ITS LENGTH AND WILL BE DETERMINED BY DISTRICT OPERATIONS PERSONNEL. IN THOSE CASES WHERE PROPER CLEARANCES FROM GROUND, TREES AND OTHER OBSTRUCTIONS CAN BE OBTAINED, BUT THE DISTANCE FROM CENTERPOINT ENERGY'S POLE TO THE CUSTOMER'S POINT OF ATTACHMENT PRECLUDES A DIRECT SERVICE DROP RUN, THE SERVICE DROP, INCLUDING NOT MORE THAN THREE SERVICE POLES, IF NECESSARY, WILL BE INSTALLED BY CENTERPOINT ENERGY AT ITS EXPENSE, PROVIDED THE TOTAL LINE EXTENSION, INCLUDING THE SERVICE DROP, IS WITHIN STANDARD ALLOWANCES. FOR INFORMATION REGARDING ELECTRIC SERVICE, CONTACT THE CENTERPOINT ENERGY DISTRICT OPERATION. WHERE A SERVICE POLE OR POLES MUST BE SET TO PROVIDE PROPER CLEARANCE AROUND OR OVER A DRIVEWAY, GARAGE, TREES, OR OTHER OBSTRUCTIONS ON THE PREMISES, A CHARGE SHALL BE MADE FOR EACH SUCH SERVICE POLE REQUIRED. PLEASE SEE THE ATTACHED DRAWING FOR THE SERVICE MAST INSTALLATION FOR REQUIRED CLEARANCE.

POINT OF ATTACHMENT

THE LOCATION OF THE POINT OF ATTACHMENT IS IMPORTANT TO BOTH THE CUSTOMER AND CENTERPOINT ENERGY FROM THE STANDPOINT OF BOTH SAFETY AND GOOD OPERATING PRACTICE; AND IT MUST, THEREFORE, BE SPECIFIED BY THE DISTRICT OPERATIONS PERSONNEL. IN GENERAL THE POINT OF ATTACHMENT SHALL BE:

1. IN A POSITION AS NEAR AS PRACTICAL TO CENTERPOINT ENERGY'S POLE TO WHICH THE SERVICE DROP SHALL BE CONNECTED, AND LOCATED SO AS TO PROVIDE A CLEAR PASSAGE BETWEEN TREES, TELEPHONE CONDUCTORS OR OTHER OBSTRUCTIONS FOR THE SERVICE DROP FROM CENTERPOINT ENERGY'S POLE TO THE CUSTOMER'S POINT OF ATTACHMENT.
2. SUFFICIENT HEIGHT TO PROVIDE PROPER GROUND CLEARANCES FOR THE SERVICE DROP.
3. LOCATED NO CLOSER THAN 3 FEET TO ANY PART OF BUILDING, STRUCTURE, OR TREE.
4. THE POINT OF ATTACHMENT SHALL BE PLACED OUTSIDE THE CONFINES OF ANY EASEMENT.
5. LOCATED NO CLOSER THAN 3 FEET TO WINDOWS, DOORS OR PORCHES FROM WHICH THE SERVICE OUTLET MAY BE ACCESSIBLE.
6. LOCATED SO THAT NEITHER THE CENTERPOINT ENERGY'S SERVICE DROP NOR THE CUSTOMER'S SERVICE ENTRANCE CONDUCTORS ARE NEARER THAN 24 INCHES TO ANY TELEPHONE OR SIGNAL WIRES, WHETHER IN THE AIR OR ON THE BUILDING.

METER SOCKET BASE

A METER SOCKET FURNISHED AND INSTALLED BY CUSTOMER'S ELECTRICAL CONTRACTOR SHALL BE CENTERED NOT LESS THAN 4' OR MORE THAN 6' ABOVE GROUND. THE METER SHALL BE LOCATED ON THE SIDE OF THE HOUSE NEAREST DISTRIBUTION POLE. ACCESS TO THE METER SHALL NOT BE BLOCKED BY LOCKED GATES, WALL OR FENCES. THE METER SOCKET BASE SHALL BE CLEARLY AND PERMANENTLY MARKED ON THE OUTSIDE BY THE PERSON INSTALLING IT TO SHOW THE ADDRESS TO BE SERVED BY THE METER. THE METER MUST BE INSTALLED ON THE SUPPLY SIDE OF THE BREAKER BOX OR FUSE PANEL. THE SEQUENCE OF CONNECTIONS OF 120/240V SERVICE SHALL BE AS FOLLOWS: SERVICE-METER-SWITCH-FUSE-LOAD.

ONLY ONE SET OF SERVICE ENTRANCE CONDUCTORS ON THE LOAD SIDE WILL BE PERMITTED. ALL SINGLE-PHASE 125A AND 200A CANS WILL BE PROVIDED WITH TAMPER PROOF LIDS. ONLY RING TYPE METER SOCKETS WILL BE ACCEPTED. HOUSING SHALL BE CONSTRUCTED FROM STEEL OR ALUMINUM IN ACCORDANCE WITH UL STANDARD #414 LATEST REVISION FOR METER SOCKETS AND SUITABLE FOR OUTDOOR USE. ALL METER HOUSINGS SHALL BE UL LISTED WITH LABEL. THEY SHALL BE USED IN ACCORDANCE WITH THEIR LABEL. METER SOCKET BYPASS DEVICES ARE NOT ALLOWED. MAINTENANCE ON ALL CUSTOMER OWNED DEVICES WOULD BE THE RESPONSIBILITY OF THE CUSTOMER. METER SOCKET INSTALLATION SHALL BE IN ACCORDANCE WITH CENTERPOINT ENERGY SERVICE STANDARDS.

GROUNDING CONDUCTOR

ALL SERVICES MUST BE PROPERLY GROUNDED. USE AN APPROVED METHOD AS DESCRIBED IN THE N.E.C.* (LATEST REVISION) SECTION 250. A DRIVEN GROUND ROD IS PREFERRED BY CENTERPOINT ENERGY. REGARDLESS OF THE TYPE OF GROUNDING ELECTRODE USED, N.E.C.* (LATEST REVISION) REQUIRES THAT THE "INTERIOR METALLIC COLD WATER PIPING SYSTEM" BE BONDED TO IT. FOR ADDITIONAL GROUNDING INFORMATION AND INFORMATION ABOUT SERVICE ENTRANCE CONDUIT, PLEASE SEE THE ATTACHED METER LOOP DRAWING. CONSTRUCTION IN AREAS WHERE ELECTRICAL INSTALLATIONS ARE GOVERNED BY CITY ORDINANCE SHALL MEET REQUIREMENTS OF ALL APPLICABLE ORDINANCES AND CODES.

* NATIONAL ELECTRIC CODE (LATEST REVISION)

NO.	DATE	REVISION	BY	CH	APP.

RESIDENTIAL OVERHEAD SERVICE ARRANGEMENT

CenterPoint Energy
HOUSTON, TEXAS

DRAWN	10-14-05	N.T. KHANH	SECTION	SUB-SECTION
CHECKED	10-14-05	J.C. DAVIS / KTN	SHEET 4 OF 4 SHEETS	
APPROVED	10-19-05	LEO H. HAAS	DRAWING NUMBER 006268 11	