

## CLEARANCES

| DRAWING NUMBER    | SHT.         | DRAWING TITLE                               | DWG REV.     | BOM REV. |
|-------------------|--------------|---|--------------|----------|
| <b>C-26-02.00</b> | <b>1</b>     | <b>GENERAL INFORMATION</b>                  | <b>0</b>     | -        |
| <b>C-26-02.01</b> | <b>1 – 2</b> | <b>SEPARATIONS IN RURAL AND URBAN AREAS</b> | <b>G / I</b> | -        |

**SaskPower** - DISTRIBUTION STANDARDS

|                           |                  |                                  |                              |
|---------------------------|------------------|----------------------------------|------------------------------|
| APPROVAL                  | DESIGN CHK       | DRN. <b>DCD</b>                  | <b>INDEX</b>                 |
| <b>L. MOEN</b>            | <b>D. DONAIS</b> | CHKD.                            |                              |
|                           |                  | <b>2018-06-05</b>                |                              |
| DATE OF ISSUE: 2018-06-07 |                  | DRAWING NO: <b>C-26-02-INDEX</b> | <b>SHEET 1 of 1</b>   REV. I |

## CLEARANCES

THE CLEARANCES AND SEPARATIONS GIVEN IN THIS SECTION ARE FOR NEW CONSTRUCTION. IN CASES WHERE S.P.C. UNDERGROUND FACILITIES ARE BEING INSTALLED WITH OTHER EXISTING FACILITIES SOME OF THESE DISTANCES MAY BE IMPRACTICAL. IN THESE CASES, CLOSE CO-ORDINATION BETWEEN THE FACILITIES IS NECESSARY DURING INSTALLATION.

ACCURATE RECORDS OF THE LOCATION OF BURIED FACILITIES ON AS-BUILT DRAWINGS, PLANS, WRITTEN RECORDS, ETC., MUST BE KEPT TO ENSURE SAFE, FAST AND ECONOMICAL MAINTENANCE ON THE SYSTEM.

REFER ALSO TO SECTION C-26-2X FOR INFORMATION ON CROSSINGS.

BACK TO INDEX PAGE

SASKATCHEWAN POWER CORP. – DISTRIBUTION ENGINEERING STANDARDS

|                        |             |                        |          |                     |        |
|------------------------|-------------|------------------------|----------|---------------------|--------|
| DRN. C.D.F.            | DESIGN CHK. | SAFETY APP.            | APPROVAL | GENERAL INFORMATION |        |
| CHKD. <i>FTK</i>       |             |                        |          |                     |        |
| DATE 87-05-28          | DATE        | DATE                   | DATE     |                     |        |
| DATE OF ISSUE 87-06-01 |             | DRAWING NO. C-26-02.00 |          | SHEET 1 OF 1        | REV. 0 |

## SEPARATIONS OF DIRECT BURIED POWER CONDUCTORS TO VARIOUS FACILITIES

THIS APPLIES TO DIRECT BURIED CONDUCTORS OF ALL VOLTAGES UP TO AND INCLUDING 25KV UNLESS OTHERWISE STATED. THESE ARE THE MINIMUM SEPARATIONS: MAINTAIN AS MUCH SEPARATION AS POSSIBLE TO ALLOW FOR FUTURE WORK ON CABLES OR OTHER FACILITIES. VERTICAL CLEARANCES APPLY WHEN FACILITIES CROSS EACH OTHER (EXCEPT FOR CONSUMER'S PROPANE AND NATURAL GAS LINES).

| FACILITY   | LOCATION                   | URBAN  |  | RURAL   |  |
|--|----------------------------|--|--|---|--|
|  |                            | HORIZ.   | VERTICAL                                 | HORIZ.  | VERTICAL                                 |
| OIL & GAS PIPELINE (NOT INCLUDING GAS SERVICE LINES)<br>(SEE NOTE 7)       | LANES & PROPERTY EASEMENTS | 1.5m   | 0.3m<br>(NOTE 3)                         | -   | -  |
|  | FARM YARD                  | -  | -  | 1.5m  | 0.3m                                     |
|  | FIELD                      | -  | -  | 10.0m   | 0.3m<br>(NOTE 3)                         |
| COMMUNICATION CIRCUITS   |                            | RANDOM SEPARATION IN SAME TRENCH (SEE B-14-65)<br>FIXED SEPARATION<br>0.3m | 0.3m<br>(NOTE 2)                         | -   | 0.3m<br>(NOTE 2)                         |
|  | FIELD                      | -  | -  | 15.0m<br>(NOTE 1)                                       | 0.3m<br>(NOTE 2)                         |
|  | FARM YARD                  | -  | -  | 1.5m  | 0.3m<br>(NOTE 2)                         |
| UTILITY WATER AND SEWER LINES  |                            | 2.0m   | -  | 3.0m  | -  |
| UTILITY NATURAL GAS SERVICE LINE   |                            | 0.6m<br>(NOTE 4)   | 0.3m                                     | 0.6m  | 0.3m                                     |
| CONSUMER'S PROPANE OR NATURAL GAS LINES<br>* WITH ELECTRICAL SERVICE BELOW |                            | (0-750V)<br>0.3m<br>(751V-25kV)<br>0.6m                                    | (0-750V)<br>0.3m*<br>(751V-25kV)<br>0.6m | (0-750V)<br>0.3m<br>(751V-25kV)<br>0.6m                 | (0-750V)<br>0.3m*<br>(751V-25kV)<br>0.6m |
| SWIMMING POOLS   |                            | (0-750V)<br>1.0m<br>(751V-25kV)<br>2.0m<br>(SEE NOTE 6)                    | -  | (0-750V)<br>1.0m<br>(751V-25kV)<br>2.0m<br>(SEE NOTE 6) | -  |
| FUEL TANKS   |                            | 1.5m   | -  | 1.5m  | -  |
| LINE POLES   |                            | 1.0m   | -  | 3.0m  | -  |
| FENCE AND DECK POSTS   |                            | 0.6m   | -  | 0.6m  | -  |
| BUILDINGS AND TOWER STRUCTURES   |                            | (0-750V)<br>0.3m<br>(751V-25kV)<br>0.6m                                    | -  | 0.6m  | -  |
| WATERWELLS   |                            | -  | -  | 1.5m  | -  |
| H.V. BURIED CABLES (CUSTOMER OWNED)  |                            | 1.0m   | 0.6m                                     | 1.5m<br>(NOTE 5)  | 0.6m                                     |
| OIL AND GAS WELL HEADS   |                            | 22.0m  | -  | 22.0m   | -  |

BACK TO INDEX PAGE

### SaskPower - DISTRIBUTION STANDARDS

|                |                 |                        |   |
|----------------|-----------------|------------------------|---|
| APPROVAL       | DESIGN CHK      | DRN. ARU               | <b>SEPARATIONS IN RURAL AND URBAN AREAS</b> |
| <b>L. MOEN</b> | <b>A. UHREN</b> | CHKD.                  |   |
|                |                 | <b>2016-12-16</b>      |   |
| DATE OF ISSUE: | 2017/05/03      | DRAWING NO: C-26-02.01 | SHEET 1 of 2   REV. G                       |

**SEPARATIONS OF APPARATUS (ABOVE GRADE) TO VARIOUS FACILITIES**

**OUTDOOR PADMOUNT TRANSFORMERS**

TO BUILDINGS (REFER TO CANADIAN ELECTRICAL CODE 26-242):

- 3.0m FROM ANY COMBUSTIBLE SURFACE OR MATERIAL ON A BUILDING.
- 6.0m FROM ANY WINDOW, DOOR, OR VENTILATION OPENING ON A BUILDING. HOWEVER, TRANSFORMERS SHALL BE PERMITTED WITHIN 6.0m OF ANY DOOR, WINDOW, OR ANY VENTILATION OPENING PROVIDED A NON COMBUSTIBLE WALL OR BARRIER IS CONSTRUCTED BETWEEN THE TRANSFORMER AND THAT DOOR, WINDOW, OR VENTILATION OPENING.
- THESE CLEARANCES MAY BE REDUCED TO 1.0m FOR 3 PHASE TRANSFORMERS AND 0.6m FOR SINGLE PHASE TRANSFORMERS PROVIDED THE TRANSFORMERS HAVE BOTH A CURRENT LIMITING FUSE AND AN APPROVED PRESSURE RELIEF DEVICE. REFER TO B-08-10 AND B-08-11.

TO FUEL TANKS (REFER TO CSA STANDARD, CAN/CSA C22.3 NO. 7):

- 1.5m OF HORIZONTAL CLEARANCE FROM ANY TANK WITH AN AGGREGATE CAPACITY OF 7600L OR LARGER. FOR TANKS LESS THAN 7600L, A HORIZONTAL CLEARANCE OF 300mm IS REQUIRED.

ACCESSIBILITY TO TRANSFORMERS

- IN ALL CASES 3.0m CLEARANCE MUST BE MAINTAINED FROM THE ACCESS SIDE (FRONT) OF THE TRANSFORMER

**DIELECTRIC LIQUID-FILLED OUTDOOR PADMOUNT EQUIPMENT (OTHER THAN TRANSFORMERS)**  
(REFER TO CANADIAN ELECTRICAL CODE 26-014)

- 6.0m FROM ANY COMBUSTIBLE SURFACE OR MATERIAL ON A BUILDING; OR ANY DOOR, WINDOW, OR ANY VENTILATION INLET OR OUTLET. HOWEVER, EQUIPMENT SHALL BE PERMITTED TO BE INSTALLED WITHIN 6.0m OF ANY DOOR, WINDOW, OR VENTILATION OPENING PROVIDED A NON COMBUSTIBLE WALL OR BARRIER IS CONSTRUCTED BETWEEN THE EQUIPMENT AND THAT ITEM.

**NON OIL FILLED APPARATUS AND EQUIPMENT**

- SINCE ALL ENCLOSURES ARE GROUNDED AND LOCKED, THE ONLY SEPARATION REQUIRED IS FOR OPERATION AND MAINTENANCE.

**NOTES:**

1. THESE SEPARATIONS VARY WITH LENGTH OF PARALLEL. REFER TO 'SASKTEL CO-ORDINATION/S.P.C. RURAL UNDERGROUND DISTRIBUTION AGREEMENT.'
2. SEE DRAWING C-26-25.01 FOR SPECIFIC CLEARANCES OVER OR UNDER ALL SASKTEL CABLES EXCEPT FIBRE OPTIC CABLES. REFER TO DRAWING C-26-25.01 (NOTE 7) FOR FIBRE OPTIC CABLE CROSSING.
3. SEE DRAWINGS C-26-23.01, C-26-23.02, C-26-23.03, FOR SPECIFIC CLEARANCES OVER AND UNDER THESE TYPES OF LINES.
4. WHERE INSTALLATION IS IN A COMMON TRENCH, THE CLEARANCE MAY BE REDUCED TO 0.3m.
5. IN AREAS ASSOCIATED WITH FARM ANIMALS INCREASE TO 2.4m.
6. SWIMMING POOL CLEARANCES ASSUME NON-CONDUCTING JACKETED CABLES. FOR UNJACKETED OR SEMI-CONDUCTING JACKETED CABLES, CLEARANCES ARE INCREASED TO 2.0m (0-750V) AND 6.0m (751V-25KV).
7. TRANSGAS CORPORATE CONSENT IS REQUIRED WHEN WORKING WITHIN 10m OF A TRANSGAS EASEMENT. IF NO EASEMENT EXISTS, THEN CONSENT IS REQUIRED WITHIN 15m OF TRANSGAS PIPELINE. A PROXIMITY AGREEMENT IS REQUIRED FOR ANY WORK WITHIN 30m OF A TRANSGAS PIPELINE.

|   |               |                               |   |        |
|---|---------------|-------------------------------|---|--------|
| <b>SaskPower - DISTRIBUTION STANDARDS</b> |               |                               |   |        |
| APPROVAL                                  | DESIGN CHK    | DRN. <b>QS</b>                | <b>SEPARATIONS IN RURAL AND URBAN AREAS</b> |        |
| <b>L. MOEN</b>                            | <b>Q. SUN</b> | CHKD.                         |   |        |
|   |               | <b>2018-05-10</b>             |   |        |
| DATE OF ISSUE:                            | 2018-06-07    | DRAWING NO: <b>C-26-02.01</b> | <b>SHEET 2 of 2</b>                         | REV. I |