

**ICC Docket 05-0675**  
**Direct Testimony of Larry G. Parker**  
**AT&T Illinois Exhibit 1.0**

**Schedule LGP-1**

**Joint Committee on Administrative Rules**  
**ADMINISTRATIVE CODE**

**TITLE 83: PUBLIC UTILITIES  
CHAPTER I: ILLINOIS COMMERCE COMMISSION  
SUBCHAPTER f: TELEPHONE UTILITIES  
PART 785 JOINT RULES OF THE ILLINOIS COMMERCE COMMISSION, THE OFFICE OF THE STATE  
FIRE MARSHAL, AND THE ILLINOIS EMERGENCY MANAGEMENT AGENCY: FIRE PROTECTION  
AND EMERGENCY SERVICES FOR TELECOMMUNICATIONS FACILITIES  
SECTION 785.55 TECHNICAL REQUIREMENTS**

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**Section 785.55 Technical Requirements**

- a) Power and Communications Systems
  - 1) All direct current (DC) power supply service feeds shall be fused at a level not to exceed the rated capacity of the smallest conductor used in the feed, or 200% of the maximal operational consumption of the feed, whichever is smaller.
  - 2) The use of equalizing center design, the practice of tapping smaller power cables to larger power cables, is only permitted when fused at the tap, or fused in accordance with subsection 785.55(a)(1) above.
  - 3) Main power supply systems, both AC and DC, shall be designed to enable a practical, safe disconnection of all interior feed circuits using a master or zoned master switches or fuses. Multiple locations for zoned master switches or fuses may be utilized, but no more than three locations per floor shall be permitted except that existing telecommunications switch facilities with multiple power supply systems exceeding three locations per floor shall develop and utilize a coded layout plan for effective zoned disconnections subject to individual approval by the Office of the State Fire Marshal. Details of such disconnect plan shall be made a part of the pre-emergency plan.
  - 4) Carriers should consider the incorporation of surge protective devices for use on AC service to mitigate the potential impact of equipment damage due to transient or overvoltage surges.
  - 5) Armored cable, rigid or flexible metal conduit, or any other cable with an exterior metallic or conductive external surface shall not be placed in cable trays containing AC, DC or communications cables.

- 6) Wherever possible, existing AC and DC power cables should be physically separated from communications cables. New construction shall have AC and DC power cables physically separated from communications cables.
  - 7) Use of cables employing polyvinyl chloride (PVC) insulation for any new or expansion of facilities shall be allowed only if the cable has an oxygen index rating of 28 or higher, unless monitored by a system designed to sense chloride emissions.
  - 8) Removal of old cable shall be monitored by each telephone company or telecommunications carrier to guard against damage to remaining cable.
- b) Detection Systems
- 1) Design and installation shall comply with fire protection standards as published in the NFPA's Code 72 and 72E.
  - 2) Types of fire detectors include heat, smoke, flame, laser, photo-electric, aspiration, ionization and fire-gas types. Detection systems shall utilize a minimum of two (2) types of devices monitoring each alarm zone within a facility for buildings exceeding 1,600 square feet. Buildings of less than 1,600 square feet will require one (1) single detector-type capability. Single detector-type systems shall not utilize heat only sensors.
  - 3) Each facility with multiple alarm zones within a building exceeding 1,600 square feet shall have a local interior zone annunciator panel immediately inside of an entrance door as designated in the pre-plan. The facility may also have remote monitoring by a company operated central station. Upon receipt of fire signal at such remote station, the station operator shall immediately notify the appropriate Fire Department.
  - 4) Each carrier should develop a facility inspection program utilizing thermographic infrared scanning technology or equivalent as an aid to identify abnormal heat buildup.
- c) Ventilation
- 1) All facilities shall provide ventilation access for removal of smoke and toxic gases from the facility as follows:
    - A) Single level telephone facilities consisting of no more than 1,600 square feet shall provide no less than two separate physical openings of sixteen (16) square feet each or greater on separate sides of the facility unless the local fire agency agrees to accept a single opening.

B) All facilities exceeding 1,600 square feet (including multi-story buildings) shall provide at least two (2) vent access openings per floor. The minimum size of each opening shall be sixteen (16) square feet for each 10,000 square feet of floor area, except that multiple vent openings per floor shall not be required where mechanical smoke evacuation systems are present and are acceptable to the local fire agency.

d) Suppression

- 1) Automatic discharge systems containing water, dry chemical, foam or other suppression agents shall not be required in rooms housing switching, toll, main distribution frame, power, auxiliary power and AC switchboard equipment.
- 2) Suppression systems utilizing sprinklers or Halon shall be provided in cable vault areas and other areas not excluded by subsection 785.55(d)(1) above, except that no suppression systems are required for telecommunications buildings less than 1,600 square feet.

e) Inspections

- 1) The Agencies shall be permitted to inspect all facility locations for compliance.
- 2) Each carrier shall permit the fire department or fire protection district to conduct an annual inspection of each telecommunications facility. The local fire department shall have the option of inspecting more than once a year if it so requests. Fire departments with full-time staff shall be allowed to conduct an inspection for each of the three shifts, if requested.