

ORDINANCE NO. O-15480  
(New Series)

O. 81-135  
(REV.)

APR 6 1981

AN ORDINANCE OF THE CITY OF SAN DIEGO AMENDING CHAPTER VII, ARTICLE 3, DIVISION 1 OF THE SAN DIEGO MUNICIPAL CODE BY AMENDING SECTIONS 73.0101, 73.0103, 73.0104, 73.0105, 73.0106, 73.0107, 73.0108, 73.0109; ADDING NEW SECTION 73.0110; AND BY RENUMBERING OLD SECTION 73.0110 TO SECTION 73.0111 RELATING TO THE RULES, REGULATIONS AND STANDARDS OF SERVICE QUALITY FOR CABLE TELEVISION SYSTEMS OPERATING IN THE CITY OF SAN DIEGO.

BE IT ORDAINED, by the Council of The City of San Diego, as follows:

Section 1. That Chapter VII, Article 3, Division 1 of the San Diego Municipal Code be amended by amending Sections 73.0101, 73.0103, 73.0104, 73.0105, 73.0106, 73.0107, 73.0108, 73.0109 and by adding new Section 73.0110 to read as follows:

ARTICLE 3

DIVISION 1

CABLE TELEVISION SYSTEM OPERATING  
RULES AND REGULATIONS

SEC. 73.0101 CITATION OF ORDINANCE

This division may be cited as the San Diego Cable Television System Operating Rules and Regulations Ordinance.

SEC. 73.0103 PURPOSE AND INTENT

The purpose and intent of this division is to assure that residents of the City of San Diego who subscribe to the service of a cable television system which has been granted a franchise by the city shall receive television signals without degradation within the limitations imposed by the state of the art. These standards shall apply to all channels carried on a cable system.

SECTION 73.0104 DEFINITIONS

Whenever used in this division the following words or phrases shall mean:

(a) "City" shall mean The City of San Diego, a municipal corporation in the State of California.

(b) "Council" shall mean the City Council of City.

(c) "City Manager" shall mean the City Manager of City as that office is defined in Section 27 of the City Charter and any officer or employee of City appointed by the City Manager to act for him.

(d) "Cable Television System" shall mean a system of antennas, cables, wires lines, towers, wave guides, or any other conductors, converters, equipment or facilities, designed and constructed for the purpose of producing, receiving, amplifying and distributing, audio, video and other forms of electronic or electrical signals, located in the City as delineated in each franchisee's ordinance.

(e) "FCC" shall mean the Federal Communications Commission.

(f) "Franchise" shall mean the right and authority granted by an ordinance of City to construct, maintain and operate through use of public streets, or other public rights of way or public places in the City.

(g) "Grantee" shall mean the person to whom the franchise is granted by an ordinance of City and any lawful successor or assignee of the original grantee.

(h) "Local Station" shall mean a television broadcaster maintaining its main studio in City or operating a transmitter in City or within 10 miles at City's limits.

(i) "Subscriber" shall mean any person or entity receiving for any purpose the Cable Television System service of grantee.

(j) Technical abbreviations shall have the meanings as described in "The Institute of Electrical and Electronics Engineers, Standard No. 198, Radio-Electronic Terms, abbreviations of."

(k) Technical Definitions.

(1) "Signal Level, or Visual Carrier Level." The peak voltage of a radio frequency carrier wave modulated with FCC standard composite TV signal, measured during the synchronizing interval.

(2) "dBmV." The unit of signal or noise level referred to one millivolt across 75 ohms. (0dBmV equals 1000 microvolts across 75 ohms.)

(3) "Noise Level." The root-mean-square voltage of noise level due to modulation processes, thermal or other noise providing effects but does not include hum and other undesired signals of discrete frequency. The noise is measured in the 4.0 MHz bandwidth between 1.25 and 5.25 MHz above the lower channel boundary of a cable television channel.

(4) "Signal (or carrier) to noise ratio." The difference in dB between signal level and noise level on the same channel.

(5) "Cross-Modulation." The transfer of modulation from one channel to another.

(6) "Hum Modulation Ratio." The ratio between the peak-to-peak ripple at 60 or 120Hz on an otherwise unmodulated carrier, to the peak carrier level.

(7) "Spurious Signals." Any discrete frequency occurring within the channel boundaries which is not a desired carrier, subcarrier, or sideband.

SEC. 73.0105 GENERAL REQUIREMENTS

(a) Local Service Office. Each franchisee shall maintain an office within the City of San Diego, which office shall be open during reasonable business hours, have a local telephone number listed in the directory of The Pacific Telephone and Telegraph Company, and be so operated that complaints and requests for repair or adjustments may be received at any time.

(b) The grantee shall provide to each subscriber written notice of the procedures for reporting and resolving complaints at the time of the initial subscription to the cable system and at any other time the grantee makes a change in his office location, his telephones or his complaint procedures. Present subscribers shall be so notified within 90 days of the adoption of this ordinance.

(c) If a subscriber or prospective subscriber is unable to obtain satisfaction from the grantee in the resolution of a problem or in the initiating of service, he may file a written complaint with the City Manager of The City of San Diego, 202 "C" Street, 92101. The letter should include the complainant's name, address and telephone number, the name of the cable television system involved, the nature of the problem and a chronological history of his and the company's actions relative to the complaint. Upon receipt of such a written complaint the City Manager shall take such action as is reasonably necessary to investigate and resolve the circumstances surrounding the complaint.

(d) Carriage of Local Stations. All local stations carried on a Cable Television System shall have as high a picture quality as any other station carried on the Cable Television System. However, a Cable Television System franchise grantee shall not be required to upgrade the quality of the off-the-air signal received to comply with this section.

(e) All programming carried on a cable television system including Los Angeles or any other distant stations shall

be maintained in a manner that fully complies with the provisions of this ordinance.

(f) System Maps and Layout. The grantee shall have at all times up-to-date route maps of suitable scale showing all receiving pickup locations and the location of all amplifiers and trunk and distribution lines. Lines to individual outlets need not be shown. The scale of the maps shall be sufficient to clearly show the required details, and in no event less than 1 inch = 400 feet.

(g) System Construction Standards. The system shall be installed and maintained in accordance with standard good engineering practices and shall conform when applicable with the National Electrical Safety Code, Bureau of Standards Handbook No. 130, Rules for Overhead Line Construction (General Order No. 95) and Rules for Construction of Underground Communications Systems (General Order No. 128) of the California Public Utilities Commission, the California Administrative Code, Title 24, Part 3, The City of San Diego Municipal Code, and any other governmental agency standards or codes which are adopted in the future which directly or indirectly apply to cable television system construction standards.

(h) Grounding. Trunk, distribution, and customer drops shall be properly grounded, but in no case less than the first and every tenth pole plus each power location. Each ground shall consist of a minimum of 8' ground rod connected with No. 8 copper wire or equivalent.

(j) Power Supply r.f. Attenuation. Each cable powering point shall be equipped with appropriate lightning protective devices, and shall provide not less than 40 dB r.f. attenuation over the frequency range of 5 to 300 MHz.

(j) Shielding. Shielding shall be such as to restrict radiation as prescribed in Section 76.605(a) (12) of the FCC Rules and Regulations.

SEC. 73.0106 TEST DATA REQUIRED

(a) Head-End. Upon completion of construction or major modification or within sixty days from the date of adoption of this article, the following performance data shall be collected at the head-end using appropriate test signals consistent with the state of the art inserted at the antenna input terminals, and measured at the interface between the single channel equipment output and the channel combining networks. Tower mounted transmission lines, filters, preamplifiers and UHF/VHF converters are excluded from the following tests: However, where possible, transmitted vertical interval test signals should be observed to indicate whether excluded tower equipment substantially meets performance standards.

- (1) Video carrier to noise.
- (2) Multiburst frequency response.
- (3) Differential phase.
- (4) Differential gain.
- (5) Magnitude and frequency of spurious signals.

(b) A copy of the annual measurements and report required by the FCC shall be provided to the City.

(c) Trunk Monitor Check Points. The franchisee shall designate trunk monitor points strategically located in the distribution plant. The total number of trunk route miles divided by the number of designated monitor check points shall not exceed 20. Such monitor check points shall be subject to approval by the City Manager.

The following data shall be collected and recorded at each trunk monitor check point no fewer than once per month:

(1) Visual and aural carrier levels on all channels.

(2) Video carrier to noise ratio on all channels (measured without interrupting service).

(3) Visual inspection of pictures on all channels for visible distortion produced within the cable system.

(d) Repetition of Tests. If the City Manager deems it necessary to assure distribution of TV signals without material degradation, he may from time to time request a franchise grantee to repeat part or all of the performance tests specified above, as appropriate.

(e) Retention of Test Data. All performance test results, as well as complaint reports hereinafter specified shall be kept on file by the franchisee for a period of at least twelve months. All such files shall be open for inspection at reasonable times by City Manager.

SEC. 73.0107 PERFORMANCE STANDARDS

(a) The visual signal level across a terminating impedance which correctly matches the internal impedance of the cable system as viewed from the subscriber terminals shall be not less than the following appropriate values:

<u>Internal Impedance</u>	:	<u>Visual Signal Level</u>
75 ohms	:	1 millivolt
300 ohms	:	2 millivolts

(At other impedance values, the minimum visual signal level shall be  $\sqrt{0.0133Z}$  millivolts, where Z is the appropriate impedance value.)

(b) The visual signal level on each channel shall not vary more than 12dB within any 24 hour period and shall be maintained within:

(1) 3dB of the visual signal level within 6MHz nominal frequency separation, and;

(2) 9dB of the visual signal level on any other channel, and;

(3) A maximum level such that signal degradation due to overload in the subscriber's receiver does not occur.

(c) The peak voltage of the aural signal on Class I standard broadcast signals shall be maintained between 13 and 17 dB below the associated visual signal level. On pay service channels with scrambling devices the aural signal may be 10dB below the visual signal level.

(d) The ratio of visual signal level to system noise shall be not less than 36dB.

(e) Cross modulation ratio on any channel shall not exceed -50dB. There shall be no visible cross-modulation products produced on any channel carried by the Cable Television System.

(f) Multiburst frequency response of single channel equipment for head-end shall conform with the following:

White Level	OdB Reference
0.5 MHz	+0, 2dB
1.5 MHz	+0, 2dB
3.0 MHz	+0, 2dB
3.2 MHz	+0, 2dB
3.58 MHz	+0, 2dB
4.1 MHz	+0, 2dB
4.18 MHz	+0, 6dB *
4.2 MHz	No Specifications

\* Not more than 4dB below the level of the 3.58 MHz burst.

(g) Because there is no FCC tolerance on transfer linearity, single channel equipment should be adjusted for the best practicable performance. In no case, however, shall system differential phase exceed  $5^{\circ}$ , nor shall differential gain exceed 2dB.



(h) Spurious frequencies in any channel shall be attenuated at least 46dB below visual carrier level as defined in Section 73.0104, paragraph (k), unless it can be shown that a particular spurious frequency at higher level is not perceptible on a commercial TV set.

(i) Incidental radiation shall conform with FCC specifications, Section 76.605(a) (12).

(j) The peak to peak variation in visual signal level caused by undesired low frequency disturbance (hum or repetitive transients) generated within the system, or by inadequate low frequency response shall not exceed -3% of the visual signal level.

(k) The channel frequency response shall be within the range of + or -2 decibels for all frequencies within -1 MHz and +4 MHz of the visual carrier frequency.

(l) Direct pick-up causing leading ghosts or blanking bars or co-channel interference, shall not be visible on a thoroughly shielded test receiver connected to any service drop. Ghosts, unwanted signals, ringing, or reflections of any sort shall be either eliminated or minimized, subject to the limitations imposed by the technical state of the art. The design, construction, and operation of the entire Cable Television System from antenna to service drops and baluns shall be such as to minimize all such reflections and stray pickup.

(m) Cable Television systems shall conform to all applicable FCC Rules and Regulations. Should the FCC at some future date relinquish regulation of cable television systems, the City shall retain the same FCC technical standards and regulations under this ordinance as applicable.

#### SEC. 73.0108 MEASUREMENT METHODS

(a) Signal level measurements shall be made with a properly adjusted and calibrated selective r.f. voltmeter or signal level meter or spectrum analyzer.

(b) System noise may be measured using a frequency-selective voltmeter (field strength meter) which has been suitably calibrated to indicate rms noise or average power level, and which has a known bandwidth. An oscilloscope should be connected to the video output of the field strength meter to insure that any peaks that may be noted are not caused by a spurious frequency or cross modulation interference problem. With the system operating at normal levels and with a properly matched resistive termination substituted for the antenna, noise power indications at the subscriber terminal are taken in successive increments of frequency equal to the bandwidth of the frequency-selective voltmeter, summing the power indications to obtain the total noise power present over a 4.0 MHz band centered within the cable television channel. If it is established that the noise level is constant within this bandwidth, a single measurement may be taken which is corrected by an appropriate factor representing the ratio of 4.0 MHz to the noise bandwidth of the frequency selective voltmeter. If an amplifier is inserted between the frequency-selective voltmeter and the subscriber terminal in order to facilitate this measurement, it should have a bandwidth of at least 4.0 MHz and appropriate corrections must be made to account for its gain and noise figures. Alternatively, measurements made in accordance with the NCTA standard on noise measurement (NCTA Standard 005-0669) may be employed.

(c) When deemed necessary by the City Manager, cross modulation shall be measured as follows:

Method I. A block diagram of the setup for this test is on file in the office of the City Clerk as Document No. 732488. Normal picture and sound input signals (including FM signals where carried) are supplied to each channel to be carried except the channel under observation; a CW signal is supplied to the viewing channel at white level. No cross-modulation products ("windshield-wiper" effects)

should be visible on a monitor receiver located at an appropriate test drop, at an ambient temperature of 32° Fahrenheit or above.

(d) Spurious signals may be detected and identified with a spectrum analyzer or other suitable instruments.

#### SEC. 73.0109 COMPLAINT PROCEDURES

(a) The grantee shall keep a record of all complaints from subscribers. The record shall identify the subscriber and his address, the location and date of the complaint, and a technician's report on the disposition of the complaint including the following items, as applicable.

(1) Carrier levels at the service drop terminal.

(2) Carrier levels and carrier to noise ratio at the customer's receiving outlet. (Note: since interruption of service to other customers must be avoided, it is recognized these noise measurements may not be entirely accurate.)

(3) If the complaint is caused by defects in customer's TV set, including inadequate shielding or grounding, explain.

(4) If the complaint involves direct pick-up, describe tests to determine whether there is leakage into the cable system. A code reference to the test procedure used is acceptable if the procedure instruction is on file in the cable television office records and the City Communications and Electrical Division's records.

(5) Make and model and effectiveness of the antenna switch installed, if any.

(6) If the complaint involves visible crosshatch or herringbone interference, describe fully, including probable causes and corrective steps. (Note: such interference also may be present on signals received directly without cable.)

(7) Visual check for cross-modulation (without interrupting service to customers.)

(8) Check for problems originating at the head-end.

(9) Other relevant remarks, including corrective action taken.

(b) Upon request of the City Manager, grantee shall, within ten (10) days after receiving such request, send a written report to Manager with respect to any complaint. Such report shall provide a full explanation of the investigation, findings, and corrective steps taken. When the complaint concerns technical performance, such report shall include the items in subsection (a) of Section 73.0109, as applicable.

(c) The grantee shall acknowledge complainants' requests for repair or adjustments promptly, but in no event longer than 16 hours after notice.

(d) The grantee shall complete all repairs or adjustments promptly, but in no event longer than 7 days after notice, except for unavoidable delays, without fault and beyond control of the grantee (financial inability excepted).

(e) The grantee shall limit failure to a minimum by locating and correcting malfunctions promptly, but in no event longer than 24 hours after notice, except for unavoidable delays, without fault and beyond control of the grantee (financial inability excepted).

#### SEC. 73.0110 DATA FORMS AND REPORTS

(a) Cable Television Systems franchise holders shall provide the City Communications and Electrical Division with copies of the following documents:

(1) Data taken in accordance with the monthly Cable Television Performance Report.

(2) "Annual Report of Cable Television Systems" (FCC Form 325) shall be submitted after filing same in accordance with FCC Rules and Regulations, Part 76, Subpart 1, Paragraph 76.403.

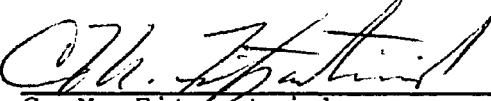
(3) Any other reports submitted to other regulatory agencies related to the performance of the Cable Television System.

Section 2. That Chapter VII, Article 3, Division 1 of the San Diego Municipal Code be amended by renumbering old Section 73.0110 as follows:

<u>Old Section</u>	<u>New Section</u>
SEC. 73.0110 CONSTITUTIONALITY	SEC. 73.0111

Section 3. This ordinance shall take effect and be in force on the thirtieth day from and after its passage.

APPROVED: JOHN W. WITT, City Attorney

By   
C. M. Fitzpatrick  
Senior Chief Deputy

CMF:vl:490  
~~11/1/80~~ Rev. 2/24/81  
Or.Dept.: Gen. Serv.& T&LU

Passed and adopted by the Council of The City of San Diego on APR 6 1981,  
 by the following vote:

Councilmen	Yeas	Nays	Not Present	Ineligible
Bill Mitchell	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Bill Cleator	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Susan Golding	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Leon L. Williams	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Fred Schnaubelt	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Mike Gotch	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Dick Murphy	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Lucy Killea	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Mayor Pete Wilson	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

AUTHENTICATED BY: PETE WILSON  
 Mayor of The City of San Diego, California.

CHARLES G. ABDELNOUR  
 City Clerk of The City of San Diego, California.

(Seal)

By Barbara Berridge Deputy.

I HEREBY CERTIFY that the foregoing ordinance was not finally passed until twelve calendar days had elapsed between the day of its introduction and the day of its final passage, to wit, on

MAR 23 1981, and on APR 6 1981

~~I FURTHER CERTIFY that said ordinance was read in full prior to its final passage.~~

I FURTHER CERTIFY that the reading of said ordinance in full was dispensed with by a vote of not less than a majority of the members elected to the Council, and that there was available for the consideration of each member of the Council and the public prior to the day of its passage a written or printed copy of said ordinance.

CHARLES G. ABDELNOUR  
 City Clerk of The City of San Diego, California.

(Seal)

By Barbara Berridge, Deputy.

Office of the City Clerk, San Diego, California	
Ordinance Number <u>O-15480</u>	Adopted <u>APR 6 1981</u>

RECEIVED  
CITY CLERK'S OFFICE

CERTIFICATE OF PUBLICATION APR 24 AM 10: 57

SAN DIEGO, CALIF. *hja*

SAN DIEGO CITY OF  
202 C St., 12th floor  
San Diego, CA 92101  
Attn: B. Berridge

IN THE MATTER OF

NO.

AN ORDINANCE AMENDMENT RELATING TO THE  
RULES, REGULATIONS AND STANDARDS OF CABLE TV

**ORDINANCE NO. 0-15480**

AN ORDINANCE OF THE CITY OF SAN DIEGO AMENDING CHAPTER VII, ARTICLE 4, DIVISION 1 OF THE SAN DIEGO MUNICIPAL CODE BY AMENDING SECTIONS 73.0101, 73.0103, 73.0104, 73.0105, 73.0106, 73.0107, 73.0108, 73.0109, 73.0110; ADDING NEW SECTION 73.0110; AND BY RENUMBERING OLD SECTION 73.0110 TO SECTION 73.0111 RELATING TO THE RULES, REGULATIONS AND STANDARDS OF SERVICE QUALITY FOR CABLE TELEVISION SYSTEMS OPERATING IN THE CITY OF SAN DIEGO.

The revised ordinance updates and improves the ordinance adopted by the City Council on July 7, 1970. The changes bring the ordinance into conformity with current technical standards and practices, and revised Federal Communications Commission (FCC) Rules and Regulations.

The technical revisions bring the ordinance abreast of the times in terms of language and system quality standards. Definitions are improved and report requirements are clarified and expanded, providing better regulatory control with less burden on the cable companies. Performance to ordinance standards of distant stations carried on the cable system is now required.

In the event the FCC relinquishes control of cable television systems, a clause has been added which provides that the City will maintain the same technical standards and regulations.

New requirements have also been incorporated in the ordinance to improve customer service. A local service office must be maintained by each franchise holder so that complaints and requests for repair or adjustment may be received at any time. The companies are directed to notify their customers in writing of any complaint reporting procedures.

Also added is a customer complaint procedure. Complaints may be filed with the City's Cable Television Officer if the customer is unable to obtain a resolution of his complaint through the company.

A complete copy of the Ordinance is available for inspection in the Office of the City Clerk of the City of San Diego, 12th Floor, City Administration Building, 202 "C" Street, San Diego, CA 92101.

Introduced on March 23, 1981.  
Passed and adopted by the Council of The City of San Diego on April 6, 1981.

AUTHENTICATED BY:  
PETE WILSON,  
Mayor of The City of San Diego, California.  
CHARLES G. ABDALHOVA,  
City Clerk of The City of San Diego, California.  
(SEAL)  
By BARBARA BERRIDGE, Deputy.  
Publish April 20, 1981

I, Camille Simpson, am a citizen of the United States and a resident of the County aforesaid; I am over the age of eighteen years, and not a party to or interested in the above-entitled matter. I am the principal clerk of the San Diego Daily Transcript, a newspaper of general circulation, printed and published daily, except Saturdays and Sundays, in the City of San Diego, County of San Diego, and which newspaper has been adjudged a newspaper of general circulation by the Superior Court of the County of San Diego, State of California, under the date of January 23, 1909, Decree No. 14894; and the

ORDINANCE NO. 0-15480

is a true and correct copy of which the annexed is a printed copy and was published in said newspaper on the following date(s), to wit:  
April 20, 1981

I certify under penalty of perjury that the foregoing is true and correct.

Dated at San Diego, California this 20th day of Apr., 19 81.

*Camille Simpson*

(Signature)

4 3/8" x 2 x 7.33 = \$64.14