BEFORE THE DIRECTOR OF REGULATORY AGENCIES

STATE OF HAWAII

In the Matter of the Use and Tariffing of Converters.	)	Order No. 63

ORDER INITIATING FORMAL INVESTIGATION
INTO THE USE AND TARIFFING OF CONVERTERS

NOTICE IS HEREBY GIVEN that the Director of Regulatory Agencies, State of Hawaii, hereby institutes a formal investigation pursuant to Section 1.27 of Chapter 1, Title VIII, of the Department's Rules and Regulations.

1. Scope of investigation.

The investigation will attempt to gather all reasonably available data and all policy arguments necessary or appropriate to the development of substantive rules concerning the following issues:

a. Should CATV operators be permitted to sell as well as lease converters to their subscribers?

b. Should uniform rates and charges among CATV operators be established for the following: (i) the monthly rate for leasing a converter; (ii) the amount, if any, of any deposit required in connection with the lease of a converter; (iii) the price charged

subscribers for the sale of a converter (i.e., should a uniform relationship to the CATV operator's cost be established?). If so, what should such rates and amounts be?

c. Should standardization be prescribed in the types of converters sold or leased by CATV operators?

d. Should converters in any manner be utilized to control access by subscribers to pay services?

e. Should services offered as a part of the regular monthly rate have preference over pay cable services for placement on channels not requiring a converter?

In addition, the investigation will attempt to gather generally available information concerning: (1) the manufacturers of converters; (2) the technical capabilities and types of converters; (3) the availability of converters in Hawaii from sources other than CATV operators; and (4) the prices currently charged by manufacturers and other suppliers of converters.

2. Background.

a. Converter functions.

A cable converter is a self-contained electronic appliance which is inserted in

the CATV drop cable ahead of the TV receiver input terminals for the primary purpose of allowing the subscriber to view all channels carried on the system, usually in cases where more than a 12 VHF channel capacity is provided. Through the use of a converter, midband and superband channels beyond the conventional 12 VHF channel capacity and beyond a total of 35 channels are provided. A converter may be designed to provide the following additional benefits to the cable subscriber:

(1) Conversion of cable signals carried on non-standard frequencies within a cable system, to frequencies compatible with broadcast television receivers.

(2) Elimination of "direct pickup" co-channel interference in the nature of a left-side shadow (leading "ghost"), or parallel lines ("beat"), appearing in areas with strong television off-the-air signals. (Tunable converters only.)

(3) Prevention of television receiver local oscillator energy from leaking into the cable system and

possibly creating interference to other television sets on the same cable system.

(4) Elimination of "image" interference to any other cable channel.

(5) Reduce adjacent channel interference ("out-of-channel" signals) appearing in certain low-priced broadcast television sets not equipped with adjacent channel traps. (Tunable converters only.)

(6) Decoding of "scrambled" pay-television or other restricted cable signals, or interfacing for upstream communications in two-way cable systems.

b. Types of converters.

(1) Block converters.

A block converter serves to add a block of seven midband or seven superband channels to the basic twelve. The only control on the block converter is the band switch (from the basic twelve to the mid-band or the superband). There are several designs: (a) with single conversion requiring inverted

carriers at headend; (b) with double conversion with non-inverted carriers; (c) with crystal-controlled, or free-running local oscillators. Block converters do not disable the remote channel selection device of a television receiver. The block converter has the shortcomings of direct pickup interference and adjacent channel interference in certain localities resulting in further restricting the limited channel carriage in a system by up to twice the number of strong local VHF-TV broadcast transmitters on channels 7 through 13.

(2) Tunable converters.

A tunable converter allows the selection of each cable channel one-by-one similar to a television receiver. The selection is accomplished either by a rotary knob with up to 36 positions, or by a slider, or by a group of pushbuttons (with a bandswitch). The channel selector

may be located on the self-contained converter box, or separated from it for remote control of channel selection. Channel selection can be achieved mechanically or electronically. A tunable converter is equipped with a manual or an automatic fine tuning control for proper adjustment of the output frequency. Output channel frequency is selected so that it does not fall on a local broadcast transmitter frequency. All tunable converters are of a double-conversion type.

c. Current practice.

Two of the largest cable operators in this State have differing and potentially conflicting policies concerning the use and tariffing of converters.

Oceanic Cablevision, Inc., includes a converter in its basic monthly rate of $9.10. Except in the North Shore area, all customers are routinely supplied a converter. No deposit is required. Converters currently enable Oceanic's subscribers in the Honolulu area to receive additional programming on seven midband or superband channels included at the basic subscriber rate. Oceanic uses specially modified converters to prevent basic rate subscribers from receiving its

single pay-access channel. Pay-access subscribers receive a converter permitting access to all midband and superband channels including the channel on which pay services are carried.

T.V. Systems, Incorporated, has no converters in service at present but intends in the near future to offer converters on a much different basis. Under T.V. Systems' plan, converters are not included within the basic subscriber rate. The subscriber satisfied with 12 broadcast channels may elect to have no converter at all. Pay services will be carried on channels access to which does not require a converter. (T.V. Systems does not employ converters to control access to pay services. Such access is controlled by the use of traps located off the subscribers' premises.) Subscribers electing to acquire converters, according to the company's current plans, will in the near future be able to receive service on one additional midband or superband channel included at the basic subscriber rate. The reception of additional signals which may be added in the future also will require a converter. Subscribers desiring converters may either lease them or purchase them outright. If a subscriber leases a converter, he must pay a deposit equal to the company's delivered cost and pay a monthly rental of $1.00. The deposit is to be held by the company for the subscriber's benefit at 6% simple interest and is returned to the subscriber if and when the converter is returned to the company. Leased converters will be serviced by the

company at no charge to the subscriber. Converters will be sold at 10% over their cost to the company. Subscribers also would be permitted to purchase converters from third-party suppliers and attach them to the cable system. The company will charge a service fee if it services any converters owned by the subscribers.

It is plain that conflicts may arise as subscribers move between these contiguous permit areas. Subscribers of Oceanic although obligated to return the device have paid no deposit. Converters in their possession have plain and considerable value in T.V. Systems' permit area. T.V. Systems' subscribers who purchase converters lawfully have a device permitting access to Oceanic's pay services.

Additionally, since the access to more than 12 broadcast channels as a practical matter will require a converter at least for the foreseeable future, it appears that other cable operators are likely to employ them. At least indirectly, all cable companies' interests are affected by the resolution of these issues.

3. Submission of written data, views and arguments.

a. Oceanic Cablevision, Inc., and T.V. Systems, Incorporated, shall within 60 days of the date of this Order file with the Division a written statement which shall as a minimum set forth (i) the company's position on the issues set forth in paragraphs 1a through 1e hereof; (ii) any data, views or arguments

which the company desires to advance in support of such position; and (iii) the company's best estimates of the effect of adoption of a contrary position on its operations.

b. All other CATV permit holders, the CATV Advisory Committee and all interested members of the public may within 60 days of the date of this Order submit a written statement setting forth their views and arguments on the issues set forth in paragraphs 1a through 1e hereof.

c. Any written statements filed pursuant to this Order shall be available for examination by the public at the office of the Cable Television Division, Department of Regulatory Agencies, Second Floor, Kamamalu Building, 1010 Richards Street, Honolulu, Hawaii 96813. All interested persons will be permitted to file written comments on any submission made pursuant to this paragraph within 20 days of the filing thereof.

It is anticipated that upon the conclusion of this investigation formal substantive rule-making proceedings will be instituted at which all interested persons will be afforded

an opportunity to testify.

DATED: Honolulu, Hawaii, June 15, 1978.

Wayne Minami
Director of Regulatory Agencies

DIRECTOR'S CERTIFICATION

I, WAYNE MINAMI, Director of Regulatory Agencies, do hereby certify that the attached "ORDER INITIATING FORMAL INVESTIGATION INTO THE USE AND TARIFFING OF CONVERTERS" is a true and correct copy of the original on file in the Department of Regulatory Agencies.

Wayne Minami
Director of Regulatory Agencies

DATED: June 15, 1978
Honolulu, Hawaii