UNITED STATES TARIFF COMMISSION

MERCURY-WETTED CONTACT RELAYS: WORKERS OF THE RAPID CITY, S. DAK., PLANT OF C. P. CLARE & COMPANY

Report to the President
on Investigation No. TEA-W-129
Under Section 301(c)(2) of the Trade Expansion Act of 1962

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C O N T E N T S

Note.--The whole of the Commission's report to the President may not be made public since it contains certain information that could result in the disclosure of the operations of an individual concern. This published report is the same as the report to the President, except that the above-mentioned information has been omitted. Such omissions are indicated by asterisks.

REPORT TO THE PRESIDENT

U.S. Tariff Commission,
March 23, 1972.

To the President:

In accordance with section 301(f)(1) of the Trade Expansion Act of 1962 (76 Stat. 885), the U.S. Tariff Commission herein reports the findings of an investigation, made under section 301(c)(2) of the act, in response to a petition filed on behalf of a group of workers.

On January 24, 1972, the Commission received a petition for determination of eligibility to apply for adjustment assistance filed on behalf of the former workers of the Rapid City, S. Dak., plant of C. P. Clare & Co., a Division of General Instrument Corp. The Commission instituted its investigation (TEA-W-129) on January 31. The investigation was undertaken to determine whether, as a result in major part of concessions granted under trade agreements, articles like or directly competitive with mercury-wetted contact relays produced by C. P. Clare & Co. at Rapid City, S. Dak., are being imported into the United States in such increased quantities as to cause or threaten to cause the unemployment or underemployment of a significant number or proportion of the workers of the Rapid City plant.

Public notice of this investigation was given in the Federal Register of February 4, 1972 (37 F.R. 2702). No public hearing was requested, and none was held.

In the course of its investigation, the Commission obtained information from its files, the Department of Labor, the Western

CONSIDERATIONS SUPPORTING THE COMMISSION'S FINDING

The Rapid City plant of C. P. Clare & Co., where the petitioning workers were employed, was established in 1966. From 1968 through 1971, the company concentrated its output of mercury-wetted contact relays at the Rapid City plant; the production of such relays accounted for the great bulk of the plant's output in those years. During 1971, average monthly employment at the plant declined from a high * * * in May * * * to a low * * * in December * * *. Late in December, the Rapid City plant was closed following a decision by C. P. Clare to assemble most of the mercury-wetted contact relays it produced for the U.S. market at its plant in Nogales, Mexico.

The Trade Expansion Act of 1962 establishes four criteria to be met in order for an affirmative determination to be made in a worker case. Those criteria are as follows:

(1) The imports in question must be increasing;

(2) The increased imports must be a result in major part of concessions granted under trade agreements;

(3) The workers producing the like or directly competitive article must be unemployed or underemployed; and

(4) The increased imports resulting from trade-agreement concessions must be the major factor in causing or threatening to cause the unemployment or underemployment.

If any one of the above criteria is not satisfied in a given case, the Commission must make a negative determination. In the Commission's judgment, the second criterion has not been met in the case at hand and

C. P. Clare and the other firm have consisted of the assembly of the relays using components obtained almost wholly from the United States. In the 3-year period that C. P. Clare has been importing mercury-wetted contact relays, less than * * * percent of the value of such imported relays has been subject to duty, and the reductions in duty resulting from trade-agreement concessions have not been in major part the cause of increased imports of those articles. The U.S. components contained in the relays account for the predominant part of the value of the assembled product, but, as noted above, the free entry of U.S. components is not the result of trade-agreement concessions but rather the result of the application of item 807.00. In the light of these circumstances, the Commission necessarily has made a negative determination.

INFORMATION OBTAINED IN THE INVESTIGATION

Description of Articles Under Investigation

Virtually the entire output of the Rapid City, S. Dak., plant of C. P. Clare & Co. has consisted of mercury-wetted contact relays. The basic element of such relays is a small glass capsule which contains two or more contacts (or sets of contacts) and a single movable armature that is switched from one contact (or set of contacts) to the other when the relay is energized. A small reservoir of mercury is located in the bottom of the capsule. The mercury flows from the pool in the bottom of the capsule up the armature by capillary action and "wets" the circuit contacts when the relay is activated. This assures constant contact characteristics, permanent low-contact resistance, positive contact closure, and prevents contact bounce, pitting, and burning.

The capsule, which must be mounted in a vertical position, is hermetically sealed under a high-pressure hydrogen atmosphere and placed inside a coil, and then the entire assembly is put in a container, tested, and filled with a sealing compound. The container normally is either a round metal can similar to a metal vacuum tube with pin or lug contacts on the bottom, or a rectangular case suitable for printed-circuit-board mounting. Up to four capsules can be placed in one container.

to or in electrical circuits; switchboards (except telephone switchboards) and control panels; all the foregoing and parts thereof." Mercury-wetted contact relays were classified for duty purposes under paragraph 353 of the original schedules of the Tariff Act of 1930 as "all articles suitable for producing, rectifying, modifying, controlling, or distributing electrical energy . . . wholly or in chief value of metal, and not specially provided for." Such articles were dutiable at 35 percent ad valorem from June 18, 1930, through June 5, 1951.

As a result of trade-agreement concessions negotiated at Torquay, England, the rate was reduced from 35 percent ad valorem to 17.5 percent ad valorem effective June 6, 1951. The current rate--8.5 percent ad valorem--represents the final stage of the five-stage concession granted in the Kennedy Round negotiations under the General Agreement on Tariffs and Trade; it became effective on January 1, 1972. Imports of mercury-wetted contact relays in 1971 accounted for only [a very small] * * * percent[age] of the value of all imports under item 685.90 in that year.

The various rates of duty applicable to mercury-wetted contact relays under the Tariff Act of 1930, as modified by trade-agreement concessions, are given in the following table.

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U.S. Producers

The seven U.S. producers that responded to the Commission's questionnaires accounted for virtually all of U.S. production, shipments, and exports of mercury-wetted contact relays during the period 1967-71. * * *. Most of the U.S. producers are divisions or subsidiaries of large diversified corporations, many of which are multinational firms. All of the U.S. producers of mercury-wetted contact relays manufacture other types of relays as well; most of them also manufacture other types of electronic components and equipment. [Some] * * * U.S. producers * * * manufacture mercury-wetted contact relays only for their own consumption in the manufacture of other types of electrical equipment; the remainder ship virtually all their output to independent customers.

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U.S. Consumption

* * * Apparent U.S. consumption of mercury-wetted contact relays increased steadily from * * * 1967 to * * * 1971. [Much] * * * of U.S. consumption during this period consisted of captively consumed mercury-wetted contact relays that were never offered for sale on the open market. Over the same period, apparent U.S. consumption of mercury-wetted contact relays not captively consumed increased steadily from * * * 1967 to * * * 1971 * * *. * * * Changes in

Only [a small] * * * percent of U.S. production and [a small] * * * percent of U.S. producers' open-market shipments of mercury-wetted contact relays were exported during 1967-71. * * *.

U.S. Imports

U.S. imports for consumption of mercury-wetted contact relays began in 1969 * * * declined * * * in 1970, and increased [substantially] * * * in 1971. * * *

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General Instrument Corp.

General Instrument Corp., the parent firm of C. P. Clare, is a multinational conglomerate with headquarters in Newark, N.J. In 1971 it had operations in 14 States and seven foreign countries. The corporation is ranked among the largest 500 firms in the United States, with total sales of $267 million for all of the firm's worldwide operations during the fiscal year ended February 28, 1971 * * *. In February 1971 the corporation employed 21,200 workers throughout the world; more than 54 percent of them were employed in the corporation's overseas operations. The corporation's diverse operations are organized into nine groups. They are the Cable TV Systems and Products Group, the Capacitor Products Group, the Defense and Engineering Products Group, the Electromechanical Products Group, the Entertainment Electronic Products Group, the Semiconductor Products Group, the Totalizator Systems Group, the Electro-Optical

the term "C. P. Clare" will apply to all of the above-named divisions of General Instrument Corp.

C. P. Clare & Co. was founded in 1937 and remained an independent firm until 1958, when it was acquired by Universal Products Corp., the name of which was later changed to Universal Controls. In 1968, C. P. Clare was purchased by General Instrument Corp. Since then C. P. Clare's sales have constituted a significant share of the total sales by General Instrument Corp., * * *.

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Nogales, Sonora, Mexico, plant

Along with many other U.S. manufacturers, C. P. Clare opened an assembly operation in Mexico in order to take advantage of both the Programa Nacional Fronterizo (PRONAF) of the Mexican Government and the provisions of TSUS item 807.00.

For several years Mexico has, through PRONAF, endeavored to improve economic conditions in Mexico along the Mexican-U.S. border. In 1965 the Mexican Government announced the Programa de Industrializacion de la Frontera Norte de Mexico, which was designed specifically to attract foreign manufacturing facilities, particularly those involving assembly operations. Under this program Mexico permits United States firms to establish plants within 20 kilometers (about 12 miles) of its border with the United States, from the Gulf of Mexico to the Pacific Ocean. After obtaining approval from the appropriate Mexican Government ministries, the foreign firm may ship