

PERIL POINT

FOR

COPPER

Arizona Department of Mineral Resources

May, 1959

32.7-CENT PERIL POINT INDICATED FOR COPPER IN 1958
BY INCREASED PRODUCTION COSTS SINCE APRIL, 1951
WHEN 24-CENT PERIL POINT WAS ESTABLISHED

In 1951, when the 24-cent peril point was established, the figure was accepted by all as reasonable and fair. The mistake at that time was the failure to attach an escalation feature to the measure. If this had been done, the peril point to-day would be at least 32.66 cents, for production costs have gone up over 36.1 percent since April 1951, when the 24-cent point was established.

A weighted average of three Arizona copper producers gave the following distribution of the cost of producing copper:

42% is represented by wages.
29% is represented by supplies.
13% is represented by taxes (property and production).
16% is represented by freight, refining and marketing costs.

The base hourly earnings rate for April 1951 was \$1.589, and for the year 1958 it was \$2.399, an increase of 51.0%. Table I.

Based on consumer price index of 110.4 in April 1951 and 123.5 in the year 1958, there was an increase of 11.9% in cost of supplies. Table II.

Taxes (property and production) have gone up 42.2% (based on \$.0128 per pound of copper in 1951 and \$.0182 per pound in 1958). Table III.

Freight, refining and marketing costs have gone up 36.1% (based on \$51.28 per ton in 1951 and \$69.77 per ton in 1958). Table IV.

Distributing these rising rates in proportion to their effect on cost distribution, we get:

42%	@	51.0%
29%	@	11.9%
13%	@	42.2%
16%	@	36.1%
<u>100%</u>		<u>36.1%</u>

Hence, if a peril point of 24.0 cents per pound of copper was satisfactory in 1951, then in 1958 the peril point should have been raised by 36.1%, or 8.66 cents per pound, making the new peril point 32.66 cents.

It is to be noted that when the copper industry agreed to setting the peril point at 30 cents, the consent was based upon getting a 4-cent tariff on copper. Now, however, the prevailing tariff is only 1.7 cents per pound, which became effective on July 1, 1958, with no fixed peril point.*

Since Feb. 2, 1959, the producer price has been 30 cents or better, and already we have begun to hear cries of foreign producers for a suspension of the U. S. Tariff. It so happens that if the 4-cent tariff bill had been enacted, the import tax would have been automatically suspended as soon as the price of copper reached 30 cents. But the bill failed of enactment, and domestic producers had to be satisfied with the restoration of the 1.7 cent tax when the copper tariff suspension act expired on June 30, 1958. It would therefore seem only fair that a peril point of 32-34 cents and not 30 cents would justify suspension of the 1.7 cent copper tariff.

As a matter of fact, there really should be no suspension of the tiny 1.7 cent copper tax at all, as it does not come anywhere near offsetting the advantages which foreign copper producers have over domestic producers, in high-grade ores, cheap labor costs, and devalued currencies.

Forty-One Percent Increase In Operating Costs Indicated By Companies'

Financial Reports Indicating a Peril Point of 33.8 Cents

In an effort to get additional evidence that the copper peril point of 32.66 cents was reasonable and modest, a study was made of the published annual reports of three of the large Arizona copper mining companies. The operations of these companies were confined to Arizona; that is, their own mines, mills and smelters

* Except to restore the tax to 2 cents per pound if copper goes below 24 cents.

were located in Arizona, and their blister copper was shipped to eastern refineries for custom refining.

This study revealed that the actual cost of producing copper had increased 40.84 percent from 1951 to 1958; with a low of 37.84 percent for one company, and a high of 48.23 percent for another. Table V.

The previous analysis, which was based upon the increases of the most important factors that go to make up costs such as wages, supplies, taxes, freight rates, etc., indicated a 36.1 percent increase in production costs, calling for a 32.66 cent peril point. The analysis of the company costs before depreciation, depletion and federal income taxes, indicated a 40.84 percent increase, calling for a peril point of 33.8 cents.

Ad Valorem Copper Tariff Has Been Reduced 85 Percent

From 1932-1940 Period To March, 1959

From 1932 to 1940, when Congress enacted and re-enacted the 4-cent ^{import tax} copper tariff every two years (after thorough investigation each time), the price of copper averaged 10.11 cents per pound; so that on an ad valorem basis the ^{tax} duty was roughly 40 percent. On the basis of a 31-cent average price in March of 1959, the 1.7 cent ^{tax} duty was less than 6 percent ad valorem, which means an 85 percent reduction in ^{import taxes} ad valorem duties from the duties in effect during the 1932-1940 period.

A reduction from 40 percent ad valorem to less than 6 percent ad valorem should have satisfied the reciprocal trade wolves. As a matter of fact, cutting the ad valorem ^{tax} from 40 percent to 12½ percent would still permit a 4-cent ^{tax} tariff in a 32-cent copper market, and would mean a 68.75 percent ^{tax} tariff reduction. Such a large reduction should prove that domestic producers are going along with low-tariff advocates.

TABLE I

ESTIMATED EMPLOYMENT, WEEKLY HOURS, HOURLY AND WEEKLY
EARNINGS IN ARIZONA COPPER MINING BY YEARS FROM
1951 to 1958 INCL., AND BY SIX-MONTHS PERIODS IN 1958

Source: Arizona Employment Security Commission

These estimates are based upon a sample of full and part-time production and related employees whose payroll and hours are reported for the pay period nearest the 15th of each month.

COPPER MINING

	Employment	Weekly Hours <u>1/</u>	Hourly Earnings <u>2/</u>	Base Hourly Rate <u>3/</u>	Weekly Earnings
1951-April	10,400	47.2	\$ 1.71	\$ 1.589	\$ 80.71
1952-Year	10,700	47.1	1.92	1.785	90.43
1953-Year	11,400	46.7	2.05	1.896	95.73
1954-Year	11,600	45.3	2.13	2.012	96.49
1955-Year	11,700	47.0	2.23	2.075	104.81
1956-Year	13,200	47.0	2.38	2.215	111.86
1957-Year	14,000	43.74	2.42	2.324	106.00
1958-1st 6 Mos.	13,567	39.99	2.359	2.359	94.33
-2nd 6 Mos.	13,500	39.63	2.439	2.439	96.65
-Year	13,533	39.80	2.399	2.399	95.49

1/ Actual hours worked.

2/ Includes overtime earnings.

3/ Base Hourly Rate is a straight time rate, and is obtained by dividing the Weekly Earnings by the Weekly Hours plus 50% of the excess hours over 40 hours.

TABLE II

CONSUMER PRICE INDEX

Source: U.S.Dept. of Labor

<u>1947-49</u>	<u>1951</u>	<u>1956</u>	<u>1957</u>	<u>1958</u>
100.0	111.0	116.2	120.2	123.5

TABLE III

COST PER POUND OF COPPER FOR ARIZONA PROPERTY
AND PRODUCTION TAXES- BY YEARS FROM 1951 TO 1958 INCL.

Source: U.S.B.M. and Arizona State Tax Commission

<u>Year</u>	<u>Mine Production Recoverable Copper Pounds</u>	<u>Total Mining Property & Production Taxes Paid</u>	<u>Per Pound Copper</u>
1951	831,740,000	\$ 10,646,157	\$.0128
1952	791,438,000	10,893,122	.0138
1953	787,050,000	10,792,184	.0137
1954	755,854,000	11,165,842	.0148
1955	908,210,000	14,255,461	.0157
1956	1,011,816,000	19,888,383	.0197
1957	1,031,708,000	20,737,350	.0201
1958	978,000,000 p	17,811,148	.0182

p = preliminary

TABLE IV

COST OF FREIGHT AND REFINING

ARIZONA BLISTER COPPER

	<u>Freight Rate Per Ton Blister</u>	<u>Refining Cost Per Ton Blister</u>	<u>Total Cost Freight; Refining</u>
1951	\$ 21.84	\$ 29.44	\$ 51.28
1958	\$ 28.77	\$ 41.00	\$ 69.77

Continued -

TABLE IV Cont'd

DETAILS OF FREIGHT RATE INCREASES

April 4, 1951 through August 26, 1957

<u>Case Number</u>	Applies to Interstate Movement of ores and concentrates and general commodities.		Applies to Arizona Intrastate Movement of ores and concen- trates and general commodities.	
	<u>Effective Date</u>	<u>Amount of Increase Percentage</u>	<u>Effective Date</u>	<u>Amount of Increase Percentage</u>
Ex Parte 175 1st Interim	Apr. 4, 1951	2%	None	None
Ex Parte 175 2nd Interim	Aug. 28, 1951	6%	None	None
Ex Parte 175 Final	May 2, 1952	15% (a)	June 1, 1954	15% (b)
Ex Parte 196 Final	Mch. 7, 1956	6%	Section 13 Case now pending before I.C.	
Ex Parte 206 Interim	Dec. 28, 1956	5%	None	None
Ex Parte 206 Final	Aug. 26, 1957	12%	Hearing to be held by A.C.C. after decision in Section 13 case involving Ex Parte 196 increase is handed down by I.C.C.	
Total Cumulative		35.8%		

-
- (a) Maximum increase of 12 cents per 100 pounds authorized on copper and lead articles such as anodes, bars, billets, blister, bullion, ingots, mattes, pigs and slabs.
- (b) No increase authorized by either A.C.C. or I.C.C. in rates on ores and concentrates, precipitates, flotation slime, high explosives, lime - common or hydrated, silica sand, slag or tailings.

Arizona Department of Mineral Resources

March, 1959

TABLE V

1/
OPERATING COSTS AT INSPIRATION, MIAMI, AND MAGMA
YEARS 1951 AND 1958

Source: Companies' Annual Reports to Stockholders.

<u>Inspiration</u>	<u>1951</u>	<u>1958</u>
Lbs. Copper produced	78,249,439	83,641,275
Operating Costs	\$ 11,490,535	\$ 18,199,630
Cost per lb. Copper	\$.1468	\$.2176
% Increase in cost per lb. Copper 1951 to 1958		48.23%
<u>Magma (& San Manuel in 1958)</u>		
Lbs. Copper produced	36,934,447	190,703,701
Operating Costs	\$ 9,375,620	\$ 49,949,605
Less credits from other metals	2,786,510	3,060,000
Net Operating Cost for Copper	\$ 6,589,110	\$ 46,889,605
Cost per lb. Copper	\$.1784 <u>2/</u>	\$.2459
% Increase in cost per lb. Copper 1951 to 1958		37.84%
<u>Miami</u>		
Lbs. Copper produced	101,668,368	66,737,045
Operating Costs	\$ 16,868,850	\$ 20,664,891
Less credits from other metals	387,000	5,500,000 <u>3/</u>
Net Operating Cost for Copper	\$ 16,481,850	\$ 15,164,891
Cost per lb. Copper	\$.1621	\$.2272
% Increase in cost per lb. Copper 1951 to 1958		40.16%

1/ Operating costs include: Operating expenses, exploration, development, maintenance, repairs, administration, general and sundry expenses, including interest, taxes except federal income taxes. Before depreciation and depletion. After credits for metals other than copper.

2/ Actual operating cost reported by Magma to its stockholders.

3/ Miami reported sales of metals in 1958 amounting to \$22,658,138. After deducting credits for gold, silver and molybdenum amounting to about \$253,000, this leaves \$22,405,138 for copper alone. At average E. & M. J. price for 1958 of 25.764 cents, this would be equivalent to about 86,963,000 pounds of copper. Miami reports total production of 66,737,045 pounds copper in 1958, which means a carry-over of 20,225,955 pounds of unsold copper from 1957. Estimating this was sold at about 26 cents per pound would constitute a credit of about \$5,247,000 to be added to the other metal credit of \$253,000, making a total credit of about \$5,500,000.

Continued -

TABLE V Continued

<u>Totals Three Companies</u>	<u>1951</u>	<u>1958</u>
Lbs. Copper produced	216,852,254	341,082,021
Operating Costs	\$ 37,735,005	\$ 88,814,126
Less credits for other metals	3,173,510	8,560,000
Net Operating Costs	<u>\$ 34,561,495</u>	<u>\$ 80,254,126</u>
Cost per lb. Copper	\$.1594	\$.2353
% Increase in cost per lb. Copper 1951 to 1958	40.84% <u>4/</u>	

4/ This average increase of 40.84% is based upon each company's proportion of copper production and the percent increase in cost per pound of copper at each property.

Peril point of 24 cents in 1951 should therefore be increased 40.84%, or 9.8 cents, making the peril point 33.8 cents.