<u>ADDENDA</u> NO. 2

TO COPPER TARIFF BROCHURE

April, 1958

Western Governors: Resolution of February 26, 1958.

Arizona Mine Production of Copper, Lead, Zinc, Gold & Silver 1858-1957.

Table I - Arizona, United States and World Production of Copper,

United States Apparent Consumption, E. & M. J. Prices.

New Productive Capacity Making United States Self-Sufficient in

Copper Production.

Table II - New Refined Copper Withdrawn on Domestic Account - 1951-1957. Table II(b) - Refined Copper Consumed in 1954-1957, by Classes of Consumers. Table III - United States Copper Imports 1951-1957.

Table IV - United States Copper Exports 1951-1957.

Excess Imports 1951-1957.

United States and Foreign Ore Reserves and Grade.

How Average Yield of U. S. Copper Ores is Getting Lower.

Statement By A. B. Parsons Before Senate Sub-Committee On

Interior and Insular Affairs - On A Long-Range Mineral Program - March 26, 1958.

Arizona Department of Mineral Resources

April, 1958

Colorado Springs, Colorado February 26, 1958

WESTERN GOVERNORS BUSINESS SESSION RESOLUTION ADOPTED METAL AND MINERAL MINING

WHEREAS, in the last 20 years the United States has changed from almost complete self sufficiency in nonferrous metals to almost 50% dependence on foreign supplies; and

WHEREAS, in the same 20 years tariffs have been reduced both by actually reduction of rates and by internal inflation of the currency by from 60 to 80% so that they are now almost universally below 10% ad valorem; and

WHEREAS, during that period mining costs have risen to 3 to $4\frac{1}{2}$ times the 1938 level while prices have risen only to 2 to $2\frac{1}{2}$ times 1938 prices; and

WHEREAS, the world mining industry has supplied all the metals and minerals for two wars and the U. S. Government stockpiles; and

WHEREAS, those stockpiles are now filled and the productive capacity which supplied metals and minerals for those stockpiles is no longer needed; and

WHEREAS, while much of this capacity was built in foreign countries with U. S. Government encouragement most of the portion which will have to close because of high costs lies within the United States; and

WHEREAS, foreign metals and minerals now enjoy about $\frac{1}{2}$ of the U.S. market and unless adequate steps are taken they will take over much of the remaining one half now supplied by domestic producers; and

WHEREAS, it is self evident that domestic mining can not long survive unless it is assured its fair share of the domestic market on a reasonably long term basis; and

WHEREAS, the internal economic health of most of the Western States is heavily dependent on the dollars brought into those states by the export of metals and minerals and those few Western States not so directly dependent on the mineral industry and directly affected by the economic health of the adjoining states who are more dependent on the industries; and

WHEREAS, much of the tax income on which the Western State governments operate is derived directly or indirectly from the mineral industry; and

WHEREAS, it is day by day becoming more apparent that in the event of another national emergency, no appreciable amounts of any metal or mineral will be available from overseas sources and if the Eastern States are to have metals for the manufacture of munitions and essential civilian requirements they must come from the West and from Canada and Mexico; and

WHEREAS, should such an emergency result in the use of atomic weapons, the amounts of metals and minerals required for minimum reconstruction would be far beyond any currently available supply.

NOW THEREFORE BE IT RESOLVED, that the maintenance of a healty metal and mineral mining industry in the Western States is of the utmost economic importance to those states both for themselves and as major markets for eastern manufacturers, as well as being of the utmost importance to the National security and such a healthy industry may best be maintained by:

- 1. Joint action by the Administration and the Interior and Insular Affairs Committees of both Houses and the Congress in adopting and implementing a National Minerals Policy without delay; and by
- 2. The Ways and Means Committee of the House of Representatives and the Senate Finance Committee taking all steps which may be needed to assure to the domestic mining industry at least one half of the domestic market on the present proportion of the domestic market (whichever is higher) either by adequate tariffs, excise taxes, or quotas or allocation of import receipts or such combination as may be most suitable whenever an individual metal or mining industry has shown it can reach such levels.

More specifically it is recommended:

As to lead, zinc, tungsten and mercury, The Tariff Commission take early and favorable action.

As to copper, lead and zinc, the Congress approve pending industry legislation, and that the Tariff Commission approve applications for tariff relief now pending before that Commission.

As to cobalt, tungsten, mercury, fluorspar, columbium (and possibly manganese) the House Ways and Means Committee approve legislation providing sufficient import control to maintain present domestic levels of production.

As to antimony, chrome, asbestos (and possibly manganese), the House Ways and Means Committee to approve legislation allocating import receipts to maintain a minimum nucleus of production in these metals.

As to thorium, the Atomic Energy Commission either to provide a purchase program or release it from government control and cease the purchase of foreign monozite at the expense of closing domestic mines.

As to uranium, the Atomic Energy Commission refrain from purchasing high cost foreign production while limiting production domestically. We urge and request that action be taken to locate adequate purchasing depots and milling facilities sufficiently close to ore reserves and stockpiles in order to decrease the costs of transportation to producers and to the Government.

As to gold and silver, grant to U. S. citizens the same right to own gold as granted to foreign governments and an increase in the depletion rate from 15 to 23%.

Governorsattending the conference were: McNichols of Colorado, out-going chairman; McFarland of Arizona; Smylie of Idaho; Aronson of Montana; Russell of Nevada; Mechem of New Mexico; Holmes of Oregon; Clyde of Utah; Rosellini of Washington; and Simpson of Wyoming. Lt. Gov. Powers of California represented Gov. Knight who was unable to attend.

> Arizona Copper Tariff Board 508 Title and Trust Bldg., Phoenix, Arizona

ARIZONA MINE PRODUCTION OF COPPER, LEAD, ZINC, GOLD AND SILVER

1858-1956 Incl., and Preliminary in 1957 - in Terms of Recoverable Metals

Source: U. S. B. M.

	COI	PPER	LEA	AD	ZINC		
같다. 안 없는 것 같아요. 것 같아?	Short Tons	Value	Short Tons	Value	Short Tons	Value	
1874-1956 Year 1957 only (Est.)	15,224,796 512,600	\$ 5,545,567,518 307,560,000	566,016 12,500	\$ 107,821,422 3,600,000	715,127 33,300	\$ 174,288,193 7,659,000	
Total 1874-1957 Avg. Price	15,737,396	\$ 5,853,127,518 \$.18596	5 7 8,516	\$ 111,421,422 \$.0963	748,427	\$ 181,947,193 \$.12155	

	GOLD			SIL	VER	
	Ounces		Value	Ounces	Value	TOTAL VALUE
1858-1956 Year 1957 only (Est.)	12,030,619 157,300	\$	308,566,820 5,505,500	340,676,334 5,336,000	\$ 260,696,864 4,829,350	\$ 6,396,940,817 329,153,850
Total 1858-1957 Avg. Price	12,187,919	\$	314,072,320 \$ 25.769	346,012,334	\$ 265,526,214 \$.76739	\$ 6,726,094,667

First Year of Reported Production:

Gold and Silver - 1858 Copper - 1874 Lead - - 1894 Zinc - - 1905

Arizona Department of Mineral Resources

January, 1958

TABLE I

					0. 0.	Dureau or mi	1169			
		ADTRONA						·		Export
		ARIZONA	d . B	UNL'TED S	TATES	WORLD	Apparent	Prod.% of		or Foreign
		10 %	70 OI		% of		U.S.Con-	Apparent	E. & M.J.	Refinery
Veen	Mama	U. D.	world	m	World	_	sumption	Con-	Price	Price
lear	Tons	Prod.	Prod.	Tons	Prod.	Production	Tons	sumption	Per Lb.	Per Pound
1921	341,095	41.3	20.1	824,980	48.5	1,700,000	711,000	116.0	12.920¢	-
1920	300,130	40.5	19.3	904,898	47.6	1,900,000	804,000	112.4	14.570¢	-
1929	415,314	41.0	19.3	997,555	46.4	2,150,000	889,000	112.2	18.107¢	-
1930	288,095	40.9 1	16.0	705,074	39.2	1,800,000	633,000	111.4	12.982¢	
1931	200,672	37.9 1/	13.0	528,875	34.1	1,550,000	451,000	117.3	8.116¢	-
1932	91,246	38.3 1/	9.1	238,111	23.8	1,000,000	260,000	91.6	5•555¢	-
1933	57,021	29.9 1/	5.0	190,643	16.6	1,150,000	339,000	56.2	7.025¢	6.713¢
1934	89,041	37.5 1/	6.4	237,401	17.0	1,400,000	323,000	73.5	8.428¢	7.271¢
1935	139,015	36.5 I/	8.4	380,491	23.1	1,650,000	441,000	86.3	8.649¢	7.538¢
N 1936	211,275	34.4 1/	11.1	614,516	32.4	1,900,000	656,000	93.7	9.474¢	9.230¢
1937	288,478	34.3	11.1	841,998	32.4	2,600,000	695,000	121.2	13.167¢	13.018¢
1938	210,797	37.8 2/	9.2	557,763	24.2	2,300,000	407,000	137.0	10.000¢	9.695¢
1939	262,112	36.0 3/	10.5	728,320	29.1	2,500,000	715,000	101.9	10.965¢	10.727¢
1940	281,169	32.0	10.4	878,086	32.5	2,700,000	1,009,000	87.0	11.296¢	10.770¢
1941	326,317	34.1	11.7	958,149	34.2	2,800,000	1,642,000	58.4	11.797¢	10.901¢
1942	393,387	36.4	13.1	1,080,061	36.0	3,000,000	1,678,000	64.4	11.775¢	11.684¢
1943	403,181	37.0	13.4	1,090,818	36.4	3,000,000	1,502,000	72.6	11.775¢	11.700¢
1944	358,303	36.8 3/	12.8	972,549	34.7	2,800,000	1,504,000	64.7	11.775¢	11.700¢
1945	287,203	37.2	12.0	772,894	32.2	2,400,000	1,415,000	54.6	11.775¢	11.700¢
1946	289,223	47.5	14.5	608,737	30.4	2,000,000	1,391,000	43.8	13.820¢	14.791¢
1947	366,218	43.2	14.6	847,563	33.9	2,500,000	1,286,000	65.9	20.958¢	21.624¢
1948	375,121	44.9	14.4	834,813	32.1	2,600,000	1,214,000	68.8	22.038¢	22.348¢
1949	359,010	47.7 4/	14.4	752,750	30.1	2,500,000	1,072,000	70.2	19.202¢	19.421¢
1950	403,301	44.4	14.4	909,343	32.5	2,800,000	1.447.000	62.8	21.235¢	21.549¢
1951	415,870	44.8	14.3	928,330	32.0	2,900,000	1.304.000	71.2	21,2000	26.258¢
1952	395,719	42.8	13.2	925,337	30.8	3.000.000	1.360.000	68.0	21,2000	31.746¢
1953	393,525	42.5	12.7	926.448	29.9	3.100.000	1.435.000	64.6	28.7984	30.845¢
1954	377,927	45.2	12.2	835.472 5	27.0	3,100.000	1.235.000	67.6	29,69/10	29.889¢
1955	454,105	45.5	13.3	998,570	29.3	3.405.000	1.335.000	71.8	37,1914	39.115¢
1956	505,908	45.7	13.5	1,106,215	29.5	3.750.000	1.367.000	80. 9	17.87.84	40.4340
1957p	512,600	47.6	-	1,076,922	-	N.A.	1.250.000	86.2	29.5764	27.157¢

TONS RECOVERABLE COPPER MINED IN ARIZONA, UNITED STATES AND WORLD J. S. COPPER PRICE, U. S. CONSUMPTION AND U. S. PRODUCTION AS PERCENT OF CONSUMPTION Source: U. S. Bureau of Mines

See Footnotes page 27.

TABLE I (Continued) Year 1957 by Months.

Note: World Mine Production Not Available.

	1957	ARIZO	DNA Zof U. S.	UNITED STATES	Apparent U.S. Consumption	Production % of	E.& M.J. Price	Exportor Foreign Re-
	Month	Tons	Production	Tons	Tons	Consumption	Per Lb.	Per Lb.
	Jan.	43,438	46.6	93.095	117,800	79.0	35.526¢	33•337¢
	Feb.	42,910	47.5	90,181	81,300	110.9	32.576¢	30.553¢
	Mar.	44,868	47.1	95,151	106,600	89.3	31.452¢	29.555¢
	Apr.	46,757	49.5	94,416	109,500	86.2	31.517¢	29.775¢
- 26	May	43,878	47.0	93.109	115,000	0.18	31.288¢	29.448¢
1	June	40,369	44.7	90.132	86,000	104.7	30.334¢	28.410¢
	July	37,699	44.5	84.614	84,800	99.8	28 .690¢	26.727¢
	Aug.	41,967	48.3	86,876	103,700	83.8	28.098¢	25.694¢
	Sept.	41,386	48.4	85,505	105,200	81.3	26.435¢	23.926¢
	Oct.	43,328	49.4	87,753	118,800	73.9	26.335¢	22.931¢
	Nov.	42,800	48.6	87,981	111,400	79.0	26.339¢	23.109¢
	Dec.	43,200	49.0	88,109	99,000	80.8	26,320¢	22.418¢
Т	otals	512,600	-	1,076,922	1,239,000			
A	verages	42;717	47.6	89,744	103,500	86.9	29.576¢	27.157¢

Arizona Department of Mineral Resources

Revised April, 1958

NOTES:

1/ Depression began in 1930; was at its worst in 1933; gradually improved till 1937.

2/ Recession in 1938. Recovery in 1939 caused by War demand.

3/ World War II began in 1939; copper consumption reached its height in 1944.

In the year 1948 and the early months of 1949, copper was being produced in the United States at the rate of 68,000 short tons per month, imports were at the rate of 18,000 tons of blister copper and 22,000 tons of refined copper, and exports were at the rate of 12,000 tons per month. The price of copper averaged 22.5 cts. during this period, varying from 21 3/8 to 23 3/8 cts.

In March 1949 the copper import tax was suspended, and during the months following the suspension, domestic demand fell drastically, and for four months net domestic consumption of copper was at or below the level of domestic production, even though the latter was severely curtailed. During this period, imports continued at practically the same rate. The price of copper dropped from 23 3/8 cts. to 16 1/2 cts. per pound. Many mines were forced to close down, and the large low-cost producers curtailed production. The average monthly production dropped from a high of 78,000 to a low of 56,000 tons.

5/ Curtailment early in the year, and a series of strikes in August and September caused a loss in production of over 100,000 tons. Reduced consumption in the U. S. was offset by an appreciable rise in the use of copper outside of this country, chiefly Europe. Result: a short supply of copper at the end of the year.

P Preliminary.

SOURCE: Mineral Resources of the United States and Minerals Yearbook of the U. S. Bureau of Mines, and preliminary estimates.

Arizona Department of Mineral Resources

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NEW PRODUCTIVE CAPACITY MAKING

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UNITED STATES SELF-SUFFICIENT IN COPPER PRODUCTION

A reference to Table I in the <u>No. 2</u> Addenda to the Brochure on the Copper Industry, shows that the United States was an exporter of copper until 1932, when most of the U. S. copper mines were down because of the Depression. The United States did not again become a copper exporting nation until 1937, when the large U. S. copper mines began to resume production. The United States exported its surplus copper for three years, until 1940, and has since imported copper to fill its consumptive needs.

Although domestic production was only 65.0% of the apparent domestic consumption during the years 1940 to 1954 inclusive, new production began to come in, and for the years 1955, 1956 and 1957, the U. S. mines produced 74.8%, 80.9% and 86.2% respectively, of domestic consumption. The estimated equipped capacity in 1957 for the U. S. showed a productive capacity of 1,214,000 tons, which was practically equal to 1957's apparent domestic consumption of 1,250,000 tons. Additional capacity now in process will reach an estimated equipped capacity of 1,294,000 tons by 1961, when it is estimated that apparent domestic consumption of new refined copper will be 1,300,000 tons.

TABLE SHOWING ESTIMATED EQUIPPED, ANNUAL CAPACITY OF

UNITED STATES COPPER MINES IN 1957 & 1961

Chant Mana Common

Since a second	bit ions coppei
Maximum production in 1956	1,106,000 18,000 30,000 30,000 30,000
TOTAL UNITED STATES IN 1957	1,214,000
Apparent Consumption of New Copper in 1957	1,250,000
Estimated increase in Arizona, Michigan,	
Montana and Nevada by 1961	80,000
Total Estimated U. S. Equipped Annual capacity by 1961	1,294,000
Expected Apparent Consumption of New Copper in 1961.	1,300,000
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This domestic balance contrasts with the indicated excess which will occur abroad. The rest of the free world productive capacity in 1961 is expected to reach 2,903,000 tons, while the expected demand is estimated to be 1,900,000 tons, an excess of over one million tons.

TABLE SHOWING ESTIMATED EQUIPPED ANNUAL CAPACITY OF

FOREIGN COPPER MINES (Excluding Communist Countries) IN 1957 & 1961

	Short Tons Copper
Maximum production in 1956	2,184,000
South America & Africa	115,000
TOTAL FOREIGN CAPACITY IN 1957	2,299,000
Estimated increase in foreign capacity by 1961	604,000 *
TOTAL FOREIGN CAPACITY BY 1961	2,903,000
Expected foreign consumption in 1961	1,900,000

Made up o1: Canada 05,000, So. America 217,000, Australia 49,000, Africa 233,000, Others 40,000 - Total 604,000.

> TABLE SHOWING HOW ESTIMATED DEMAND FOR NEW COPPER IN 1961 IS BASED UPON THE LAST TEN YEAR RECORD

		New Copper	Consumption	
			Rest of World	Total
		U.S. 1/	Excl.U.S.S.R.2/	Free World
	1947	1,285,000	912,856	2,198,856
	1948	1,214,000	892,547	2,106,547
	1949	1,072,000	923,400	1,995,400
	1950	1,447,000	7 008 000	2,334,214
	1951	1 260 000	1,000,090 00F 677	2,512,090
	1952	T 1.25 000	818 203	2 253 203
	195)	1,235,000	1,211,847 *	2.1.76.81.7
	1955	1.335.000	1,289,732	2,624,732
	1956	1,367,000	1,354,027	2,721,027
	1957 p	1,250,000	1,564,151	2,814,151
	Est. 1958	1,250,000	1,600,000	2,850,000
	Est. 1959	1,275,000	1,700,000	2,975,000
	Est. 1960	1,300,000	1,800,000	3,100,000
	Est. 1961	1,300,000	1,900,000	3,200,000
-	Service U.S. P.M.	Annont Conclima	tion of Now Pofind	Connor
	Source: U.S.D.M.	Apparent Consump	wise to Eshricatora	Out aido II S A
	bource: Copper In	stitute: Delive	ries to rapricators	outside 0.3.A.
	Note remarkable in	crease in foreig	n consumption beginn	ing in 1954.

Arizona Department of Mineral Resources

April, 1958

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TABLE II

NEW REFINED COPPER WITHDRAWN FROM TOTAL YEAR'S SUPPLY ON DOMESTIC ACCOUNT

Compiled by Arizona Department of Mineral Resources From U. S. B. M. Reports.

	Refined production from domestic ores Refined production from foreign ores Imports 1/ Stock at beginning of year 1/	<u>1951</u> 951,559 255,429 238,972 26,000	<u>1952</u> 923,192 254,504 346,960 35,000	<u>1953</u> 932,232 360,885 274,777 26,000	<u>1954</u> 841,717 370,202 215,146 49,000	<u>1955</u> 997,499 344,960 201,640 25,000	<u>1956</u> 1,080,207 362,426 191,745 34,000	<u>1957</u> 1,050,496 403,680 161,907 109,130
	Total available supply	1,471,960	1,559,656	1,593,894	1,476,065	1,569,099	1,668,378	1,725,183
	% Increase in new supply over preceding y	r. 9.02% De	5.96%	2.20%	7.39% De	6.30%	6.33%	3.40%
	Copper exported $1/$ Stock at end of period $1/$	133,305 35,000	174,135 26,000	109,510 49,000	215,951 25,000	199,819 34,000	223,103 78,000	346,025 109,100
	Total	168,305	200,135	158,510	240,951	233,819	301,103	455,125
28	Apparent withdrawals on domestic $account \frac{2}{2}$	1,304,000	1,360,000	1,435,000	1,235,000	1,335,000	1,367,000	1,270,000
	% Increase in apparent withdrawal over preceding year	9.88% De	4.30%	5.52%	13.94% De	8.10%	2.40%	7.10% De *
	Actual copper consumed	1,416,865	1,479,732	1,494,215	1,254,729	1,502,004	1,521,389	1,350,011
	% Increase in consumptive demand over preceding year	0.53% De	4.44%	0.98%	16.03% De	19.71%	1.29%	11.26% De *

May include some copper refined from scrap. 1/

Includes copper delivered by industry to the National Stockpile. 2/

De= Decrease.

Increase or Decrease over corresponding six months of 1956. *

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TABLE II (Continued) Year 1957 By Months

		January	February	March	April	May	June	July	
	Refinery prod. of new copper: From domestic sources From foreign sources	98,401 38,961	83,239 31,024	92 ,1 03 35,943	92,532 38,411	98,958 34,104	88,091 27,569	83,275 26,021	
	Imports of refined copper	137,362 13,496	114,263 14,190	128,046 16,155	130,943 11,815	133,062 19,687	115,660 9,064	109,296 14,386	
	Total new refined Stocks of new ref. copper at producers' plants	150,858	128,453	144,201	142,758	152,749	124,724	123,682	
	beginning of period	78,000	81,100	98,500	94,700	95,600	104,900	111,600	
- 69	Total Supply Exports of refined copper	228,858	209,553	242,701	237,458	248,349	229,624	235,282	
	(ingots,bars,or other forms) Stocks at producers plants	29,933	29,769	41,376	32,315	28,479	31,954	24,420	
	end of period	81,100	98,500	94,700	95,600	104,900	111,600	126,100	
		111,033	128,269	136,076	127,915	133,379	143,554	150,520	
	Total withdrawn on domestic acc (Apparent Consumption) Blister Stocks -	t. 117,800	81,300	106,600	109,500	115,000	86,000	84,800	
	End of Period Fabricators' Stocks	254,000	252,000	263,000	261,000	255,000	251,000	258,000	
	Refined copper	435,635	422,266	429,410	429,708	434,852	426,905	432,918	

Arizona Department of Mineral Resources

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TABLE II (Continued) Year 1957 By Months Beginning August

Refinery prod of now corner	August	September	October	November	December	Total Year <u>1957p</u>
From domestic sources From foreign sources	80,754 29,037	74,395 25,870	78,296 36,938	86,063 41,888	94,389 37,914	1,046,000 404,000
Imports of refined copper	109,791 10,212	100,265 10,486	115,234 12,431	127,951 18,427	132,303 11,206	1,450,000 170,000
Total new refined Stocks of new ref. copper.	120,003	110,751	127,665	146,378	143,509	1,620,000
at producers' plants at beginning of period	126,100	119,000	97,500	86,300	90,400	78,000
TOTAL SUPPLY	246,103	229,751	225,165	232,678	233,909	1,698,000
Exports of refined copper (ingots,bars,or other forms) Stocks at producers plants	23,435	27,057	20,076	30,897	26,123	350,000
at end of period	119,000	97,500	86,300	90,400	109,000	98,000
	142,435	124,557	106,376	121,297	135,123	448,000
Total withdrawn on domestic account(Apparent Consumptio	n)		14			
	103,700	105,200	118,800	111,400	99,000	1,250,000
Blister Stocks, End of Period	270,000	285,000	298,000	285,000	274,000	272,000
Fabricators! Stocks, refined copper	429,627	425,168	420 , 130	428,520	N.A.	N.A.

Arizona Department of Mineral Resources

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TABLE II(b)

Refined copper consumed in U. S., in 1954-57, by classes of consumers, in short tons.

Class of Consumer	Cathodes	Wire bars	Ingots and ingot bars	Cakes and slabs	Billets	Other	Total
<u>1954</u> : Wire mills Brass mills Chemical plants- Secondary	8,803 83,136	649,567 54,237	10,231 82,750 11	170,144	155,359	19 2,318	668,601 545,645 2,329
smelters Foundries and	5,037	Jan ann ann ann ann ann	2,064	131		202	7,434
miscellaneous	1,972	308	16,683	257	536	10,964	30,720
	90,940	104,112	111,0139	110,532	155,095	13,503	192749129
1955: Wire mills Brass mills Chemical plants- Secondary	9,050 100,819	791,816 63,394	11,797 133,710 564	200,012	149,064	45 1,180	812,663 647,044 1,744
smelters Foundries Miscellaneous-1/	4,768 4,063 1,403	58 131	1,213 13,004 4,079	469 3 318	211 377	377 139 9,940	6,827 17,478 16,248
Total	120,103	855,399	164,367	200,802	149,652	11,681	1,502,004
1956: Wire mills Brass mills Chemical plants-	9,694 91,887	838,476 72,716	16,415 102,451 559	177,583	166,426	35 1,199	864,585 611,098 1,758
smelters Foundries Miscellaneous 1/	5,602 5,180 1,824	76 85	1,411 13,341 5,532	207 3 402	237 538	434 143 8,933	7,654 18,980 17,314
Total	114,187	911,353	139,709	178,195	167,201	10,744	1,521,389
1957: Wire mills -1/ Brass mills -2/- Chemical plants- Secondary	5,641 87,451 (3)	753,108 57,417 (3)	15,540 75,638 (3)	158,343 (3)	157,102 (3)	791 (3)	775,080 535,951 (4)
Smelters Foundries & Miscellancous	659 (3)	(3)	1,685 (3)	15 (3)	(3)	621 (3)	2,980 (4)
Total	93,751	810,525	92,863	158,358	157,202	1,412	4/1,350,011

1/ Includes all wire mills with rod-rolling facilities.

2/ Includes all brass mills using copper in refinery shapes; some have rod-rolling facilities.

3/ Not available.

4/ Consumption by chemical plants, foundries, and miscellaneous plants not included. Estimate of 36,000 tons included in total for 1957, and 3,000 tons for January 1958.

Revised April, 1958

TABLE II(b)

Refined copper consumed in U. S., in 1954-57, by classes of consumers, in short tons.

Class of Consumer	Cathodes	Wire bars	Ingots and ingot bars	Cakes and slabs	Billets	Other	Total
<u>1954</u> : Wire mills Brass mills Chemical plants-	8,803 83,136	649,567 54,237	10,231 82,750 11	170,144	155,359	19 2,318	668,601 545,645 2,329
smelters	5,037	Jar tin ca ka ca ta ta	2,064	131		202	7,434
Foundries and miscellaneous	1,972	308	16,683	257	536	10,964	30,720
Total	98,948	704,112	111,739	170,532	155,895	13,503	1,254,729
1955: Wire mills Brass mills Chemical plants- Secondary	9,050 100,819	791,816 63,394	11,797 133,710 564	200,012	149,064	45 1,180	812,663 647,044 1,744
smelters Foundries Miscellaneous-1/	4,768 4,063 1,403	58 131	1,213 13,004 4,079	469 3 318	211 377	377 139 9,940	6,827 17,478 16,248
Total	120,103	855,399	164,367	200,802	149,652	11,681	1,502,004
1956: Wire mills Brass mills Chemical plants Secondary	9,6914 91,887	838,476 72,716	16,415 102,451 559	177,583	166,426	35 1,199	864,585 611,098 1,758
smelters Foundries Miscellaneous <u>1</u> /	5,602 5,180 1,824	7 6 85	1,411 13,341 5,532	207 3 402	237 538	434 143 8,933	7,654 18,980 17,314
Total	114,187	911,353	139,709	178,195	167,201	10,744	1,521,389
1957: Wire mills -1/ Brass mills -2/- Chemical plants- Secondary	5,641 87,451 (3)	753,108 57,417 (3)	15,540 75,638 (3)	158,343 (3)	157,102 (3)	791 (3)	775,080 535,951 (4)
smelters Foundries &	659 (3)	(3)	1,685 (3)	(3)	(3)	(3)	(4)
Miscellaneous Total	93,751	810,525	92,863	158,358	157,102	1,412	4/1,350,011

Includes all wire mills with rod-rolling facilities.

1/2/ Includes all brass mills using copper in refinery shapes; some have rod-rolling facilities.

31 Not available.

4/

Consumption by chemical plants, foundries, and miscellaneous plants not included. Estimate of 36,000 tons included in total for 1957, and 3,000 tons for January 1958.

Revised April, 1958

TABLE III

U. S. COPPER IMPORTS (In Tons of 2000 lbs.)

Compiled by Arizona Department of Mineral Resources Source: A. B. M. S. and U. S. Bureau of the Census

	1951	1952	1953	1954	1955	1956	1957
CHILE:				979-0	9.00.000.000.000.000.000.000.000.000.00		
Ore, Matte & Regulus	12,097	12,332	15,764	12,548	21,600	18,711	17,368
Blister	47,178	55,543	117,521	128,850	137,885	175,889	208,461
Refined	207,895	294,425	147,292	125,596	66,558	41,915	10,190
Total (Crude & Refined)	267,170	362,300	280,577	266,994	226.043	236.515	236.019
CANADA:	Cash Diff Charles and a state of the state o						
Ore, Matte & Regulus	25,405	26,379	33.166	32.214	27.430	24.730	29.533
Blister	134	26.463	3.4.94	4.537	301	1.038	
Refined	28,352	28.324	67.187	51.1/1	71,919	93,525	87.080
Total (Crude & Refined)	53,891	81.166	101.1/17	87,892	99,650	119,293	116.613
MEXICO:	Contraction of the other states of			~1)0/2	1130,00	12/92/3	110,01)
Ore, Matte & Regulus	8,365	8.272	13.391	11,273	12.306	10.916	7.716
Blister	38,653	36.830	11,982	30,620	28,104	37,111	37 571
2 Refined	702	5.840	7,512	6.276	7,919	1,033	2,924
Total(Crude & Refined)	47.720	50,912	65,885	51,169	1.8.329	52,390	17.611
PERU:		2-37-4-	0),00))	40,50	123070	41 9044
Ore. Matte & Regulus	7.797	9.652	10,361	9.11.7	9.817	12,516	12,918
Blister	1.887	2			3,1,83	1), 29/	11, 1,86
Refined	377	1.663	16.157	13,003	17,771	16.001	14,224
Total(Crude & Refined)	10.061	11.317	26,518	22,1,50	31,101	12.81.1	11.628
N. RHODESIA:	Statement of the statem				<u></u>	429-442	41,020
Blister	39.061	28.221	85.263	60,117	62.515	13 1,62	16.728
Refined			2.778	1,232	10 657	13 865	28 051
Total (Crude & Refined)	39.061	28,221	88.011	61,61.9	73,202	27 327	11, 782
UNION OF SO. AFRICA:			00,041	01,047	179202	219721	449102
Ore Matte & Regulus	3,619	5.248	7.399	7.393	10.269	15,237	13.081
Blister	3.698	3.326	166	6.089	2,218	6.05)	5.71.2
Refined	-	-	667	0,00)	569	0,0)4	J9142
Total (Crude & Refined)	7.317	8.571	8,232	13,1,82	13.056	21 201	18 823
AUSTRALIA:		• 1/14	0,272	1),402	1),0,0	272622	10,02)
Ore Matte & Regulus	724	683	1.0/13	1,392	2,1,62	1.528	997
Blister	-	-	9,1,73	10,696	8 335	16 931	11.078
Refined			2.5/13	10,000	رررون	-	14,010
Total (Crude & Refined)	721	683	12,999	12.088	10 797	18 1.50	15.075
				12,000	1/1001	Contid	199012

U. S. Copper Imports

(Continued)

		1951	1952	1953	1954	1955	1956	1957
	CUBA:	07 905	2.0.000					
	Ore, Matte & Regulus	21,095	18,922	17,757	17,598	20,357	15,394	16,849
	BLIGLAN CONGO:	_			8 015	0 680	1. 21.4	
	Refined	-		5.799	7,1,91	1,178	8 110	10 221
	Total (Crude & Refined)			5,799	15.539	1/1.158	12.76	10,221
	PHILIPPINES:	and the game of the life of the second se	9		-19121			TOJELT
	Ore, Matte & Regulus	12,608	14,763	13,502	19,406	13,320	10,911	13.065
	CYPRUS:						and the second	
	Ore, Matte & Regulus	5,557	5,441	3,681	-	4,388	6,945	8,937
	BOLIVIA:	1 11 4						
	Ore, Matte & Regulus	4,449	3,097	3,972	3,912	3,433	4,500	4,463
	YUGOSLAVIA:	(000	0.000					
	Blister	6,223	8,022	-	-	-	-	-
		-	110,0	7,773	3,886	2,149	138	-
	Total (Blister & Keilned)	6,223	14,833	7,773	3,886	2,149	138	-
	JAPAN:	050						
W	Blister	250	-	-	-	-		-
+	Reilned	-	223		42m	eto	800	-
	Total (Blister & Refined)	258	223	**	649	evo	800	-
	OTHER COUNTRIES:							
	Ore, Matte & Regulus	159	407	538	403	286	5,226	419
	Blister	4,643	3,779	12,769	2,664	1,089	6,661	4,211
	Refined	188	9,672	16,666	6,419	50,663	21,468	9.214
	Total(Crude & Refined)	4,990	13,858	29,973	9,486	52,038	33.355	13.8/11
	TOTAL UNMANUFACTURED:	and the second						
	Ore, Matte & Regulus	102,675	105,196	120,574	118,586	125,698	122.17)	121.776
	Blister	141,735	162,189	273,608	251,918	254.140	276.085	307 -180
	Refined	238,145	346,958	274,674	215,047	200,683	191.71.5	161,907
	Total (Crude & Refined)	482,555	614,343	668,856	585,551	580,521	590,004	587.863

Cont¹d

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TABLE IV

U. S. COPPER EXPORTS (A.B.M.S. and U.S. Bureau of the Census)

	1951	1952	1953	1954	1955	1956	1957
REFINED:							and the factor of the second
France	18,627	35,573	17,834	29,239	65,062	59,969	54,195
Germany (west)	10,273	20,447	12,035	30,236	35,139	32,900	50.771
United Kingdom	70,160	48,116	22,366	25,347	28,091	15,289	89.6hh
Netherlands	8,190	5,994	11,363	24,342	16,224	8,367	7,846
Italy	7,949	17,043	10,971	18,080	9,660	26,159	33 , 534
Brazil	3,306	5,496	9,636	28,613	8,907	8,622	8,776
Switzerland	5,415	9,563	6,366	10,587	8,685	15,093	14,619
Australia	650	166	100	7,720	6,264	560	560
Sweden	593	2,242		5,941	6,449	1,824	2,520
India	218	6,243	1,830	6,237	4,831	15,835	7,617
Japan	-	-	2,349	6,842	183	29,431	46,850
Other Countries	8,010	23,252	14,660	22,766	10,212	8,487	28,602
Total Refined Exports	132,991	174,135	109,510	215,950	199,707	222,536	345,834
COPPER IN ORES etc.	-	648	669	2,370	7,398	13,717	15,656
TOTAL (Crude & Refined)	132,991	174,783	110,179	218,320	207,105	236,253	361,490

EXCESS IMPORTS

Crude & Refined

349,564 Im. 439,560 Im. 558,677 Im. 367,231 Im. 373,416 Im. 353,651 Im. 225,873 Im.

Revised April, 1958

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UNITED STATES AND FOREIGN ORE RESERVES AND GRADE

In order to determine where the American producers stand in relation to their foreign competitors, the following statistics, covering ore reserves and grade, in tons of ore and percent copper, were developed:

Partial Ore Reserves	Tons Ore	Per Cent Copper	
United States	2,100,000,000	0.925	
Chile	3,500,000,000	2.000	
Africa	800,000,000	3.500	

In Canada a large percentage of the copper produced is from complex ores such as nickel-copper and zinc-copper, so that a true comparison of grades is not possible.

1/ Paper presented Sept. 10, 1957 by J. B. Pullen to American Mining Congress.

Period	Average Coppe	Yield of r Ores 2/	Estimated Percent Extraction	Indicated Percent Copper in Ore	
1924-1928 1929-1933 1934-1938 1939-1943 1944-1948 1949-1953 1954 1955 1956	Percent 1.48 1.52 1.50 1.14 .93 .88 .83 .83 .78	#/ton ore 29.6 30.4 30.0 22.8 18.6 17.6 16.6 16.6 15.6	85% 85% 85% 84% 84% 83% 83% 83% 83%	1.74 1.79 1.76 1.36 1.11 1.06 1.00 1.00 .94	

HOW AVERAGE YIELD OF COPPER ORES HAS BEEN GETTING LOWER DURING LAST 34 YEARS

2/ Source: U. S. B. M.

Arizona Department of Mineral Resources

April, 1958

STATEMENT BY A. B. PARSONS

FOR PRESENTATION BEFORE THE SUB-COMMITTEE OF THE SENATE COMMITTEE ON INTERIOR AND INSULAR AFFAIRS ON A LONG-RANGE MINERAL PROGRAM

MARCH 26, 1958

My name is Arthur B. Parsons, I am a mining engineer and mineral economist, residing in Oakland, California. I am appearing today in behalf of the Arizona Copper Tariff Board, the Arizona Small Mine Operators Association, and the domestic copper mining industry in general.

In 1951 and 1952 I was director of the Program Development Division of the Defense Materials Procurement Agency, generally known as the DMPA. As you know, 95 per cent of the work of this agency had to do with metals and minerals in the category known as "critical and strategic."

Stated briefly, the function of the DMPA was to assure the nation, insofar as possible, an available supply of these metals and minerals in adequate quantity to meet five years of defense needs. The problem of procurement required that new sources be found. New deposits had to be opened and equipped for production. Facilities at mines already operating had to be expanded. To accomplish these objectives, the Government extended various kinds of financial help to private industry as an inducement to engage in new enterprises. A cardinal principle guiding the whole effort was: "Get it in the United States if reasonably possible." The next preferred sources were Canada and Mexico; and a not-so-good third choice was the rest of the Western Hemisphere. The reason for this sequence of preference can be stated in one word: <u>submarines</u>. As your committee well knows, during critical months of World War II, 85 percent of the cargo vessels coming from Africa were sunk by submarines.

I mention these things because, in my opinion, one of the basic and compelling reasons for developing a long-range mineral program is "national security." If the threat of war were wiped out, there would be far less urgent need for your deliberations here today. I do not mean to imply that the domestic mining industry, as such, is not a highly important part of the economy; and that in the public interest must be preserved. But national security is basic.

A long-range mineral program is essential but it presents more than one problem; in fact, many problems because there are at least a dozen metals and minerals of high strategic importance. I do not suggest that there are no elements of similarity in the situation of the various metals; but I do not know of two sets of conditions that are precisely alike. A few -2-

of the circumstances that vary are:

- 1. Normal ratio of domestic output to imports.
- 2. Potential expansion at producing domestic mines.
- 3. Existence of low-grade domestic resources.
- 4. Potential supplies from foreign mines.
- 5. Geography, political as well as physical, of foreign sources.
- 6. Relative cost of production in various countries.
- 7. Wage-scales and living standards in countries that are potential producers.
- 8. Relative hazards of procurement, including transportation.
- 9. Consideration of international relations.

The list could be expanded; but the foregoing point up the complexity of the matter.

On the other hand, one vital condition may be mentioned that is essential to a sound "long-range program" for any strategic metal. Assuming that domestic deposits actually exist that can be made to yield a substantial proportion of domestic requirements, at feasible cost, the producing industry must be maintained as a healthy, vigorous, "going" part of the domestic economy. The Federal Government can take various measures to provide a climate in which an industry of this kind can thrive. One of these measures will be pointed out in the discussion of copper that follows. But again I must stress the belief that the selection of the best medicine depends on the particular metal concerned, even though the malady may be the same.

The case for copper mining is particularly strong. The arguments are persuasive why Congress should not only safeguard the domestic industry but should make every effort to strengthen and foster it. The industry has the equipped capacity to meet current demand in full; and for the next few years it surely can provide at least 80 per cent of domestic requirements. Copper mining is a long-established, sound, and substantial business. Including smelting and refining, it represents a capital investment, on a replacement basis, of about \$2.2 billion in facilities, plant, and mine development. The domestic industry spends an estimated \$500,000,000 annually in operating expense in addition to large amounts required annually to keep plant and equipment up to date. In normal times it gives employment directly to at least 50,000 people and indirectly to many additional thousands. It is an important user of fuels, electricity, cement, explosives. steel, machinery, automotive equipment and power shovels. It generates large tonnages of long-and short-haul freight. It pays substantial taxes to local, state, and Federal governments. For several states, tax payments by the industry constitute a substantial proportion of their total revenues. As an important segment of the economy of the nation, copper mining merits the attention of Congress; but over and above all this, is its preeminent position as a supplier of the most nearly indispensable strategic metal - in short, copper mining's leading role in "national security." This, in my opinion, is an overriding consideration in any "long-range mineral program."

You have heard a detailed account of the deplorable condition presently existing in the principal copper mining states. Arizona in particular has been discussed; but the situation is equally serious in Utah, New Mexico, Michigan, Montana and Nevada. It is estimated that payrolls usually totalling \$250,000,000 annually have been reduced by 20 per cent, or \$50,000,000 as a consequence of shutdowns and curtailment of output at domestic mines. Part of this results from the actual lay-off of 7,000 men; part results from the shortening of the work-week at many properties - sometimes to as few as four days per week. You have heard described the distressing effects of this reduction on the mining communities themselves and on the surrounding regions. You have heard discussed the bad effects of shut-downs on the physical condition of the mines; and the threat of resulting waste of valuable ore reserves. The domestic industry is, in fact demoralized.

However, I shall not dwell on these phases of the problem. Instead, I shall endeavor to describe the reasons for the existing unhealthy situation; and will then suggest what I regard as the most practical and effective measure available to Congress for alleviating the ills of the domestic copper industry. Again, I stress the fact that I would not propose this particular prescription for more than a few strategic metals; but for copper I regard it as being ideal. It is the first necessary step in a "long-range" program for copper, as I see it.

The general business recession of 1957-1958 and the consequent shrinkage in industrial consumption no doubt has contributed to the drastic decline in the domestic market price for copper. However, trouble in the copper market started early in 1956, long before any softness appeared in the economy as a whole. In other words, one must look deeper than the slump of 1957-1958 to diagnose the predicament of the domestic copper-mining industry. Primarily the deterioration is the result of surplus production generated by the existence of about 400,000 tons of annual capacity in the world in excess of the present rate of demand. Several significant facts, however, should be noted: 1. So far as the productive capacity of domestic mines is concerned, almost all of the expansion came about through the action of the Federal Government, following commencement of hostilities in Korea. To induce domestic companies to expand their facilities and to launch the exploitation of numerous new copper deposits, the Government proferred financial aid of various types - primarily "Commitment-to-purchase" contracts at a "floor price." Other forms to aid, widely accorded, were the priviledge of "rapid amortization" of the capital cost of new facilities; and financial assistance in the form of loans.

2. At present domestic producing capacity and domestic demand are in close balance. Consequently, the 400,000-ton surplus exists entirely at foreign mines.

3. The present position is aggravated and the outlook for the future is darkened by the fact that a further expansion of 600,000 annual tons in equipped capacity is definitely projected for foreign properties.

4. Such curtailment as was effected during 1957, in an attempt to balance output with demand, was at mines in the United States. The deterioration in the domestic market has been a direct result of imports forced on the market by foreign producers at progressively lower prices.

All the evidence points to the conclusion that foreign copper will be forced on the domestic market in increasing quantities; and that it will displace domestic production in substantial quantity. The reasons why most foreign producers will choose not to curtail output are various; but one is that, for the most part, they can produce so cheaply that they can make a profit at prices so low that at least one-third of the domestic production cannot survive if it must compete.

The accompanying table summarizes the situation as it will exist in 1961. The year 1961 is selected for the purpose because, between now and then, the great bulk of the projected new foreign productive facilities will be ready for operation. The figures necessarily are estimates; but they have been made after long and careful consideration of historical statistics and of facts well known to those who are engaged in the copper-mining industry or are close students of it.

To arrive at the figures for expectable demand, the actual annual world consumption from 1910 to 1957 was plotted on graph paper and a "trend" line was established. This trend line, when extrapolated to 1968, showed world demand in 1961 to be 3,200,000 tons. Significantly, this figure is about 50,000 tons more than the corresponding figure established by the socalled "Paley Report" issued in 1952 by the President's Materials Policy Commission. This fact tends to confirm the view that (TO ACCOMPANY STATEMENT OF A. B. PARSONS IN CONNECTION WITH A LONG-RANGE MINERAL PROGRAM)

FREE-WORLD COPPER POSITION IN 1961

(FIGURES IN TONS)

	• • • • • • •	United States Domestic	Foreign
Expectable	Demand	1,300,000	1,900,000
Equipped	(Below 17 Cents	260,000	1,950,000
at (Indicated	Between 17 and 25 Cents	584,000	825,000
Cost	((Above 25 Cents	450,000	128,000
	Total	1,294,000	2,903,000

Deficit or Excess Capacity Over Demand

6,000 Deficit 1,003,000 Excess

Note: All figures relate to newly-mined copper.

3,200,000 tons is at least, not too low. The division of total demand, between foreign and domestic categories, is based on the assumption that the approximate ratio of consumption existing in 1956 and 1957 will obtain in 1961.

The tonnages for equipped productive capacity are based on past performance for individual mines now producing and on firm plans, publicly announced, for expansion of facilities and for the equipment of new properties.

The allocation of the individual mines to one of the three cost groups is based on common knowledge of informed people in the copper-mining industry, including engineers, economists and executives, supplementing such information as is disclosed in published company reports. The significant facts shown by the table are these:

1. By 1961 the mines of the world will have an equipped capacity to produce 1,000,000 tons more copper than will be needed.

2. This surplus, in its entirety, represents foreign capacity in excess of foreign demand.

3. After matching total foreign demand, there remains foreign capacity of 875,000 tons at a cost of under 25 cents per pound. The plain and ominous fact is that this tonnage hangs over the U. S. domestic market.

4. Only 260,000 tons of U. S. capacity (representing a single mine, incidentally) can achieve a cost competitive with the great bulk of foreign capacity.

5. One third of the domestic capacity, or 450,000 tons, has a cost above 25 cents.

The conclusion is inescapable that if events are permitted to take their course the group of mines representing this 450,000 tons cannot survive. Moreover, the entire domestic industry will feel the effects. A partly moribund industry will lack the incentive to search for new deposits; to develop and exploit those that already are known but that are not producing; and to convert "near ore" into ore. Natural resources will be wasted. The nation as a whole will suffer.

The foregoing leads to this vital question: Assuming that Congress views such an eventuality with alarm, what can it do by way of remedy? It is too much to expect that any enactment by Congress can completely cure the trouble; but Congress can take a specific action that will alleviate the gravity of the situation. As is well known, Congress has before it now a number of identical bills dealing with the import tax on copper. With your permission, I will describe them briefly: try to explain why they are sound, reasonable, and desirable: and why they offer the best prospect for lessening the threat to the domestic industry caused by the hugh excess supply of foreign copper that threatens the domestic market.

The Bills now pending before the Senate and the House would do three things:

1. Re-establish the excise tax on imports of copper at the rate of 4 cents per pound;

2. Increase the "peril-point" price, below which the tax becomes effective, from 24 cents to 30 cents per pound; and

3. Provide that the tax be lifted automatically whenever the market price is at or above the "peril point."

The domestic copper industry was first threatened with a flood of low-cost foreign copper about 1931, following a period of great expansion in productive capacity in Chile, Canada, and Africa. Faced with this situation and recognizing the importance of maintaining the health of the domestic mining industry, Congress in 1932 enacted an excise tax of 4 cents per pound on imported metal. Since that time the tax has been suspended for certain periods by Congress; and the rate has been reduced by Executive action under the terms of the Reciprocal Trade Agreements Act. However, Congress has consistently retained the tax since its original enactment, even though in the interval it has made a thorough-going revision of the Internal Revenue Act. By enacting the pending legislation, Congress would only be reaffirming its basic policy; and would merely re-establish a rate that is more nearly in line with the needs of the present situation than the 1.7 cents scheduled to go into effect on July 1. It is worthy of note that when the 4-cent import tax was enacted, copper was selling for about 5.5 cents per pound; so that on an ad valorem basis the duty was, roughly, 75 per cent. On the basis of the 25-cent price prevailing today, the 4-cent rate is only 16 per cent ad valorem.

To what extent a re-established 4-cent rate would be effective in attaining the desired objective, no one can say with assurance. That it would be helpful no one questions. Certainly it is not extravagant.

The principle of the "peril-point" price is not new. In the legislation of 1951, Congress provided, in effect, that the import tax would become effective only if the price should fall below 24 cents per pound. Similar provision was made in the legislation of 1953, 1954 and 1955. The reasoning was simple and logical. Congress desired to permit foreign copper to come in duty-free so long as it did not thereby inflict serious injury on the domestic industry. It was believed that a practical and rational measure of such possible injury was the ruling price. So long as the price was not unduly depressed, reasoned Congress, the domestic industry should have no cause for complaint. Only in the event of a drop below the peril-point did the duty become operative.

What the Bills now pending provide is simply this: That the peril-point price be increased from 24 cents to 30 cents. It is evident that a peril point of 24 cents would be meaningless to those domestic producers (representing one third of the total capacity) whose costs are in excess of that figure.

A reasonable basis for determining the appropriate peril point is to relate it to comparative production costs in 1951 (when first enacted) and in 1957. The Arizona Department of Mineral Resources has developed a set of well-authenticated figures in which the percentage increases in the principal elements of production cost are combined. The result is a weighted overall percentage of 33.1. Applying this to 24 cents, the comparable peril-point price in 1957 would have been 32 cents. As of today, the figure would doubtless be somewhat higher; certainly 30 cents is anything but exorbitant.

The last provision is the only one of the three listed that is new. It should meet universal approval, even among foreign producers who might be inclined to oppose the Bills. It provides this: If for any reason the domestic market improves and the price advances above the peril point, the import tax will be lifted automatically; and the domestic market will be open to foreign copper on exactly even terms.

The authors of the pending Bills - and the domestic industry agrees - make it clear that they do not propose to exclude foreign copper by erecting a prohibitive tax-wall. The duty would be in effect only when it was needed to give highcost domestic producers a more nearly even break.

Taken in combination, the three provisions may be described as follows:

They constitute a method of handicapping, so to speak, to make competition between foreign and domestic producers in the domestic market more nearly even. The 4-cent tax is like added "weight" assigned to the stronger horse in a race by an official handicapper. In combination, the peril point and the automatic "on-off" features say, in effect, "If the domestic horse gets stronger, we will remove the weight from the foreign horse." In my opinion, the enactment of the pending Bills is the one practical, fair and reasonable measure available to Congress to further a sound program for copper. The reasons may be summarized as follows:

1. The domestic industry is able, and will continue to be able, to supply 80 per cent or more of the expected demand.

2. Such demand can be met by output of long-established mines and mines that have been "brought in" in the last five years at the urgent request of the Federal Government.

3. The current excess equipped capacity of the world (400,000 tons annually) and the prospective equipped capacity in 1961 (600,000 <u>additional</u> tons annually) is, and will be, at foreign mines.

4. The great bulk of foreign copper can be produced much more cheaply than 80 per cent of domestic production - and the remaining 20 per cent is from a single domestic mine.

5. The chief reason for this production-cost advantage is lower wage scales and lower standards of living in countries having the big productive capacity.

6. The proposed rates - 4-cent tax and 30-cent peril point - are modest.

7. Under the three-point Plan, foreign copper has duty-free access to the domestic market when the price is high enough to let the domestic mining industry live; and the arrangement to lift the duty is automatic.

8. Largely because of Point 7, the proposed plan will minimize possible interference with foreign trade and any resulting harm to international relations.

To repeat: It seems to me that the enactment of pending Bills, now before Congress, is a first and essential step in a long-range program as it relates to copper.

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