INLAND STEEL COMPANY)
)
and) Opinion and Award
)
UNITED STEELWORKERS OF AMERICA)
Local Union No. 1010)

Grievance No.	Docket No.	Arbitration No.
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Appearances:

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L. E. Davidson, Assistant Superintendent, Labor Relations
H. Cummins, Supervisor, Industrial Engineering

For the Union:

Cecil Clifton, International Representative
F. Gardner, Chairman, Grievance Committee
J. Wolanin, Secretary, Grievance Committee

The NO. 3 Open Hearth Department, consisting of four furnaces started production in September, 1952. Each furnace had a heat size of almost 300 tons per heat. Wage incentive plans were inaugurated and placed in effect with respect to the occupations in the department.

An expansion program got under way in 1956. This program contemplated certain changes in the four original furnaces and the addition of three new furnaces (to a total of seven) with related auxiliary equipment. The principal changes, as listed by the Company in its general statement relating to all of the cases identified above, are as follows:

"1. The original steel ladles used for pouring ingots were completely rebuilt and enlarged and larger new ladles were purchased in order to permit an increase in average heat size from 300 tons to 320 tons per heat.

"2. New metering and control equipment was installed on the four original furnaces in order to introduce a higher amount of fuel into the furnace during the time the scrap charge is being melted. Increasing the maximum fuel firing rate from 800 to 1000 gallons per hour resulted in a more rapid melt-down of the scrap charge on these furnaces.

"3. Three new furnaces were built (Nos. 41-43). These new furnaces are designed to fire a maximum fuel input of 1200 gallons of oil per hour. The larger volume of pre-heated air necessary to burn this higher fuel input is supplied by an increased checker volume and larger capacity force air fans. The products of combustion are carried away by larger capacity waste heat fans than those installed on the four original furnaces.

"4. Additional equipment was installed to expedite material handling and the over-all efficiency of the operation. One additional scrap crane, one additional charging machine, an additional hot metal crane, an additional hot metal loading station, raw material crane, increased trackage, and scrap pan cars were added to the existing equipment to deliver raw material to the furnaces.

An additional ladle crane, mould crane, and locomotive were added so that the additional open hearth product could be handled efficiently.

"5. The expected over-all work foce for the seven-furnace shop to be covered by incentive was increased 50% to man the additional facilities and equipment. The work force of the operating crews, excluding the furnace crews, was increased 54%, while the maintenance crew was increased 29%. The expected changes in work force for the various occupations are shown in Company Exhibit F."

The expansion program was substantially completed in August, 1957. The Company restudied the jobs and the applicable incentive plans in the light of the equipment and other changes that had taken place. It found certain of those plans inappropriate and submitted revisions to the Union. The grievances filed by the Union with respect to the installation of those plans form the basis of all of the cases identified above.

At the hearing and in the course of the consideration of these cases, we have had the benefit of the valued assistance of Mr. Paul Edwards, an industrial engineer, who had been designated as Consultant by the Permanent Arbitrator under the authority conferred upon him in Marginal Paragraph 197 of the Agreement. Mr. Edwards' general report, consisting of an exposition and his understanding of the incentive practices involved in these cases was sent to the parties and their comments thereon have been solicited and received. Mr. Edwards has also filed reports on the individual cases heard. These reports have been reviewed and are found to be consistent with the general principles expressed in the awards in Arbitration Nos. 151, 156, 159 and 187. They are set forth below as a part of the discussion of each grievance.

In all of the cases the Union's objections, generally, were grounded on Article V, Section 5 of the Agreement (August, 1956). It is claimed, in each case, that the new (or changed) incentive plan

> "does not provide equitable incentive earnings in relation to * * * the previous job requirements and the previous incentive earnings"

(See Marginal Paragraph 57). The detail presented by the Union to support a favorable finding under the quoted provision will be set forth in the separate discussion of each case. There are however, certain allegations, claims and facts which are relevant to a consideration of all the cases. It would seem to be both suitable and expedient to refer to them at this stage.

The Union asserts that the Company has informed it that with full utilization of the facilities the productive capacity of the Department (measured by production of the furnaces) will be increased 88%. The production of 37,300 tons (average per pay period) in the period of three months of four furnace operation immediately prior to installation of the revised plans was materially increased in subsequent pay periods. For example, using the figures on the last page of Union's Exhibit No. 1 in its Statement in Grievance No. 22-F-38, the average production in the first eleven pay periods of 1958 was 43,226 tons or 5,926 tons more than in the equivalent unit of time during the three months "reference period". This increase in production was attained with the operation of a varying number of furnaces. Thus, there were five furnaces operating in the last week of the pay period ending August 10, 1957 (immediately after installa-

tion of most of the revised plans) six furnaces were operating during the pay period ending August 24, 1957 through the pay period ending October 19, 1957; five during the pay period ending November 5, 1957 through the pay period ending December 28, 1957; four during the pay period ending January 11, 1958 through the pay period May 17, 1958; and five, thereafter through the pay period ending June 28, 1958. These are averages for the number of furnaces operating during a pay period and are rounded out to whole numbers. For example, during the pay period ending March 22, 1957 in which it is represented that four furnaces were operating, the precise average was 3.83 furnaces.

The incentive earnings of all of the occupations (excepting First and Second Helpers whose pay is measured by the production of the specific furnaces they tend) is measured by the overall production of the department. The earnings of each of the occupations in these cases, says the Union, bears no equitable relation to the considerable increase in overall departmental production and what such production entails in terms of increased effort, movement, et cetera. It protests strongly that it does not seek a direct or precise positive correlation between departmental production and earnings - but it regards as inequitable a situation in which during a period of increased production, earnings levels, even when the same number of furnaces were used, were lower than heretofore, or, if not lower, not in some reasonable relationship to the increase in production. The Union took the position, throughout these cases, that substantially more work and effort is now required in the affected occupation to reach the earnings level the employees enjoyed during the three months "reference period". Further, it argues that although the revised plans are geared to maximum utilization of the expanded facilities, there is no assurance whatsoever that this will ever take place.

The earnings and production data comparisons on the basis of which the above claims are advanced will be set forth in greater detail below.

Generally stated, the Company's position is that the plans in question were developed in accordance with its standared wage incentive policy and practice. It argues that they are equitable in their relation to the "workload" of the affected occupations both before and after their inception and, further that they are equitable in relation to the previous job requirements and previous incentive earnings. It regards as unsound and inconsistent with the Agreement the Union's argument for increased incentive earnings because the equipment and technological changes made have resulted in increased production. It asserts that when increased production has been achieved by an increase in "workload" the appropriate adjustments have been made.

With this general background expressed, it is suitable and timely to proceed with a consideration of the several cases identified at the head of this decision.

A. Grievance No. 22-F-38

Docket No. IH 298-291-4/9/58

Arbitration No. 281

Furnace Crews: First, Second and Third Helper

The Consultant's report on the technical aspects of this case, together with a chart illustrating his comments is set forth below as Exhibit A.

The findings and recommendations in the Consultant's report are sound, consistent with the views expressed in the Permanent Arbitrator's prior awards in incentive cases, and are hereby made a part of this award. Several additional comments appear to be necessary, however, dealing with aspects of the case not covered in the Edwards report.

First, it must be observed that this case presents a situation in which comparison is sought to be made between unlike situations in order to ascertain whether the basic principle of equitability as stated in the Agreement has been observed. This is sufficiently difficult under controlled conditions which remain fairly static. Here, however, we have a number of variables that make precise comparison futile. Among the changing factors are the number of furnaces in operation, the size of the heats, the quantities of fuel used, the specifications of steels, the upgrading of relatively inexperienced men in substantial numbers, the operation of new equipment, the scheduling of vacations and the filling of vacancies by less experienced personnel, etc. All of these variables affect the data upon which a comparison for the purpose of determining equitableness, must be made. Hence it is not valid to rely on the naked statistics of production, earnings, or similar other factors alone. One must also inquire into the special circumstances obtaining in order to interpret the figures.

Second, considerable discussion at the hearing was devoted to the question whether the Union had agreed at the 1956 negotiations, with respect to a conversion from incentive plans expressed in money to plans expressed in standard hours, that the incentive earnings curve might commence at 50% rather than 55% of the base rate. In changing to a standard hour plan with respect to furnace crews, the Company started the rate curve at 50%.

The Arbitrator can find in the record no more than a sharp difference of opinion, between the representative of the Company and the representative of the Union as to whether the conversion in incentive plans contemplated, as well, a possible change of the point at which the incentive earnings curve might start. Ths information being insufficient for the making of any findings on that subject, none will be made. However, assuming for the purposes of this case that no understanding, such as was alleged by the Company was reached,

it does not appear that there is any important aspect of equitability affected by the change described, within the fair meaning of the applicable contract provision.

Third, the kernel of the Union's objections, (insofar as it is claimed that current incentive earnings are not equitable in relation to previous incentive earnings) is best illustrated by the data on Company Exhibit No. L in its Statement in this case. There it appears that First Helper in the 90 day "reference period" had average hourly earnings of $5.178 in a period when there were 4 furnace operations and average production per furnace hour of 31.1 tons. These average earnings were not attained during the pay periods ending August 10, 1957 - March 8, 1958. The earnings produced by the plan ranged from $4.451 (pay period ending August 24, 1957) to $5.105 (pay periods ending January 25, 1958 and February 22, 1958). During this period, four, five or six furnaces were operating at different times. Then, for the pay period ending March 25, 1958, $5.180 was achieved, only $.002 above the reference period earnings of $5.178. However, the Union observes, the practical equivalent of the "reference period" earnings was attained only by producing 43,120 tons as against 37,300 in the "reference period". Thus, for 5,820 additional tons produced, First Helpers received almost the same pay as they previously earned.

From this and like illustrations, the Union concludes that incentive earnings are not provided in equitable relationship to previous incentive earnings. Taken by itself and apart from the context of the plan in its various manifestations the illustration given above might be disquieting. However, it is necessary to look further.

In the pay period ending June 28, 1958 when five furnaces were operating to produce 51,020 tons the earnings increased to $5.296 ($.118 more than in the reference period for 13,720 more tons produced). Nor does this tell the entire story. The Company's Exhibit K shows that individual furnace crews (both First and Second Helpers) on numerous occasions have exceded the reference period earnings in various amounts. This suggests, as has been mentioned above, the effect of a variety of factors operating in combination to produce the earnings and production reflected. Thus, the number of furnaces in operation at the particular time that additional auxiliary equipment was made available and the layoff situation (relatively heavy in early 1958) as affecting available skills and experience are factors tending to obscure the meaning of the naked figures.

Another factor concerning which a considerable amount of testimony was adduced was the relative inexperience of the crews. Coincident with the expansion there was considerable upgrading and reassignment. It seems not unreasonable to assume that with the introduction of larger heats and the operation of new facilities it would take some time for a normal level of production efficiency to be achieved. This was borne out to some extent by the similarity of the curves of production per furnace hour for various periods in

the No.3 Open Hearth Department after the introduction of new equipment. It is perhaps better illustrated by an analysis, presented by the Company, of First Helpers' earnings for a nine month period ending June 28, 1958. On 57 occasions in that period earnings in excess of $5.040 (the average total hourly earnings for the pay period represented) were earned by First Helpers. 58% of such First Helpers were "experienced" in the sense that they had been "regularly assigned" as First Helpers prior to August 4, 1957 when the plan was installed) and 42% were new men. Contrariwise, of the 50 occasions when less than $5.040 was earned, 46% of the First Helpers were experienced and 54% were new men.

While this data does not have the quality of establishing as proof positive the facts they are presented to demonstrate, in the absence of an affirmative showing to the contrary it must be accepted as upport of the normal assumptions one would make, in any event, when new equipment is introduced and the operators have yet to acquire their highest skills and proficiencies in their jobs.

In conclusion, it is necessary to return to the basic question: namely, is there validity in the Union's argument that the new plan does not provide for an equitable relationship between the incentive earnings the plan is to produce and the previous incentive earnings and between the new job requirements and the previous job requirements? As to the latter (job requirements) the facts found in the Edwards report requires a negative answer. As to incentive earnings, the data discussed herein requires a similar answer. The Union has perceptively noted several inconsistencies and raised several valid questions with respect to the Company's procedures and their results. These matters, however, are too insubstantial to warrant a finding that an "equitable" relation between the earnings to be compared, in view of all of the circumstances, does not exist.

AWARD

1. Judgment is suspended with respect to a) the effects of a 1200 gallons per hour firing rate on the operation of the incentive plan and, b) the adequacy of the auxiliary equipment and the organization of the Department for simultaneous seven-furnace operation. As to both these matters, there has been insufficient experience on which a sound judgment could be based. The Union may reopen this case as to these matters should future events furnish it with valid reasons to believe they affect the equitability of the incentive plan as described in the Agreement.

2. In all other respects the grievance is denied.

EXHIBIT A

PAUL EDWARDS & ASSOCIATES

CONSULTANT'S REPORT TO ARBITRATORS
on
INLAND STEEL COMPANY - UNITED STEELWORKERS OF AMERICA
ARBITRATION OF GRIEVANCE NO. 22-F-38

Consultant's Comments on the Union Case

The Union bases its case for adjustment of the furnace crew incentive on the following items:

1. Added work for the Third Helpers due to the longer shop floor.

2. Added work per hour due to increased firing rate.

3. Added work for furnace crews when more than four furnaces are operating due to the extra load on service operations.

4. Added work per heat due to larger heats.

5. Possible limitations on production due to stretching of furnace capacity and service available for seven furnaces.

It is the contention that since the Third Helpers work on all furnaces and there are now seven furnaces stretched over a longer line, the effort of the Third Helpers must thereby be increased as a result of walking longer distances. It is the opinion of this consultant that the walking between furnaces would be a small amount of effort compared to the amount of work engaged in at specific furnaces. There was always the chance of having to walk the length of four furnaces; now there is the chance of having to walk the length of seven. But the Third Helpers are called to each furnace only a few times a day; and it is, therefore, doubtful if the amount of added effort is significant in the present case.

It is contended that there must be an increased amount of effort because heat times have been reduced, although the amount of work per heat may remain the same. The figures on heat times indicate that the contention is based on an erroneous assumption. During the reference period prior to the change, the 299-ton heats were produced in an average of 7.91 hours (Company Exhibit P), while during the last half of June heats were produced in 8.23 hours (verbal testimony). This is an increase of about 4 percent in the actual time of the heats. (It is to be noted that the tonnage per heat went up 7 percent.) Therefore, if the amount of work to be done per heat remained constant, the time in which it must be done was increased by 4 percent, which would have resulted in a decrease in the total work load. However, since the larger heats did involve some increased

amount of work, it is logical that an increase in the average work load per eight hours was found for the First Helpers and that no change was found for the Second and Third Helpers since the duties of the Second and Third Helpers are more closely related to the heat cycle than to the size of the heats.

It is contended that the Pay Loaders when operating with four furnaces could assist the Second Helpers, but that when six or seven furnaces were operating, no additional Pay Loaders being provided, there would, therefore, be an increase in the work load of the Second Helper. The consultant is not in a position to judge the validity of this statement. At any rate, there is no reason to believe that the change would be large in relation to the other work of the Second Helper.

It is contended that there was to be an 88 percent increase in production. This claim has no bearing in this case inasmuch as additional man power has been added to operate the additional furnaces. The increased output expected per man hour of furnace crew time was only 3 or 4 percent (a 7 percent increase in tonnage per heat from 299 to 320 tons reduced by a somewhat longer time to make the heat).

It is contended that the firing of twelve hundred gallons per hour had not been properly tested and that the firing at the rate of both one thousand gallons per hour and twelve hundred gallons per hour would produce roof burns to the extent that furnaces could not be kept in production. The fact is that apparently the firing rate of one thousand gallons per hour has been well established and is working satisfactorily for the larger heats. The Company furnished no records on roof life, and they are not pertinent to this case. The Union mentioned that a penalty had been instituted for burning a roof more than three inches per month; and should this penalty be imposed for conditions which are beyond the reasonable control of the First Helpers, then it would appear that the Union should seek redress through grievances on this subject. As to the firing of twelve hundred gallons per hour, testimony revealed that this had been done on an experimental basis only for short periods, and it is probable that the Company has made unjustified assumptions in setting production standards for the twelve-hundred-gallon rate. There is no logical reason why the arbitrators should approve an incentive plan which is based on as little experience as is the twelve-hundred-gallon firing rate.

It is contended that the operation of seven furnaces will so overload the service facilities of the shop that the expected rates of production cannot be maintained. The management stated that they expected to operate 6.58 furnaces as the normal maximum over a period of time. This indicates that seven furnaces would be operated about half time. The other half time one or more furnaces would be

down for rebuild. Based on past history in the steel industry, the Union contention may possibly have some merit. Many open hearths have at various times been limited in output by the ability of the stock yard to load scrap, by the ability of the floor tracks and engines to bring it to the furnaces, and by the ability of the charging machines to charge it into the furnaces. The number of ladles, ladle cranes, molds, and mold yard facilities may also become limiting factors. Certainly Inland Steel has had sufficient experience with open hearth operation to design an open hearth department with adequate service facilities. However, because seven furnaces would be operating less than half time, it may have been considered uneconomical to add, say, a fourth ladle crane or a third mold yard crane or some other major piece of equipment to assure adequate service under all conditions. It would seem quite appropriate to withhold unprejudiced approval of the incentive rates until it had been proven that seven furnaces could produce at the expected tons per furnace hour.

It is contended that the present rate does not provide for special steels. It was stated that the previous rate had provisions for special steels which require longer times per ton of steel produced. It is to be noted that the furnace standards do provide for varying carbon analyses, as well as a provision for the amount of cold iron charged. The carbon analysis is a reflection of the grade of steel being produced; and although it does not provide for special steels as such (i.e., alloy steels), it is probable that these standards are adequate for the kind of steels normally being made in the No. 3 Shop. To protect itself against a gradual shift in the quality of steel being made in the No. 3 Open Hearth, a check might be made on the proportion of special steels whenever it has seemed to increase. Then if the number of special heats does increase significantly over a period of time, even over a long period of years, the Union will be in a position to bring the matter to the Company's attention and request standards for special steels as they are needed.

Comments on the Company Case

Work load of the First Helper - Between eight and nine months prior to the change in the incentive plan, the Company made time studies of the work of the First Helper for nine turns. The length of the time studies seems adequate, and it is doubtful if anything further could have been gained in accuracy by extending these studies. No detail data was submitted on the method of making time studies. It is understood that the actual times were leveled to incentive pace. Rest and personal allowances were added, 10 percent being a minimum and 30 percent the maximum added for this purpose. There is a question in the mind of this consultant whether 30 percent allowance is sufficient for such activities as: "shovel material into furnace," "rake front area," "build and repair banks," and "shovel material into bath." These operations are performed under severe conditions of heat and are outside of the experience of most industrial engineers.

Even though an argument might be made on the Company time study allowances for seven heat conditions, it happens that in this case only the difference in the work load before and after the changes is used. When converted to total work load and further converted to earnings, the amount becomes infinitesimal. For example, assume that the allowances for some factors were increased enough so that the total work load changed by 5 percent. Then:

Original work load	=	67.5%	(x 1.05)	=	70.9%
Work load after changes	=	69.7%	(x 1.05)	=	73.2%
Difference		2.2%			2.3%
x 35% incentive earnings		0.770			0.805

The Company used 0.8

The difference in earnings has been reduced to .005%, hardly a significant amount.

The conversion from the time study data made at one thousand gallons per hour firing rate and for 299-ton heats to the other conditions of eight hundred gallons per hour for 299-ton heats and to one thousand gallons per hour for 320-ton heats appears to be logical, and the data arrived at by this method is certainly more useful for this purpose than if time studies had been made on each of the three separate practices. The Company industrial engineers found an increase in work load of 2.2 percent for the First Helpers by the conversion method they used and checked it out later by check time studies on 320-ton heats. It is not seriously challenged by the Union and should be accepted as adequate for the purpose. The conversion from the increase in work load to the increase in earnings is shown on Chart V. The incentive plan which the Inland Steel Company purports to be correct for the First Helpers would be represented by a line on this chart drawn from 50 percent of the base rate at zero work load through the Point "C" for the condition existing prior to the change and through the Point "D" for the condition existing after the change. Since the actual earnings were 155.7 percent of the base hourly rate, the actual point was located at "A"; and the Company moved on a line parallel to the line through "CD" to establish the Point "B." This resulted in an expected increase in pay of 0.8 percent of the base hourly rate. The method that the Company has used to revise the incentive plan is based on logic. Each step is based upon a reasonable assumption.

The rest of the Company's computations follow a logical pattern and are sound both mathematically and industrial engineeringwise.

In the case of the Second Helper (Company Exhibit I), the work load was found to remain unchanged; and, therefore, the Company proposed no change in earnings at the expected output. (There was a change of .4 percent made in order to bring the standards for the Second and Third Helpers to the same figures, not justified by the measurement of performance.) The starting point for the incentive earning line was set at 50 percent of the base hourly rate. There was no testimony as to whether this represented a significant change in the form of the incentive or not. The Point "A" on the First Helper chart would be at 149.5 percent of base rate and 51 percent work load. This point would have remained unchanged so that it would also represent Point "B" on the First Helper's chart. Points "C" and "D" on the theoretical earnings line would also have been represented by a single point. The Third Helpers were treated like the Second Helpers, their pay, of course, being based upon average furnace performance and not upon their individual furnaces. Their work load was shown as 47.6 percent. There were no adjustments for the changes in furnace size or practice.

With the twelve-hundred-gallon firing rate, if and when proven in, the output may be 7 percent higher per furnace hour. The pattern of earnings during the past year indicates a steady improvement and is presented as showing that the expected output and earnings will be attained.

Consultant's Recommendations

It is recommended that the technical work of the Company industrial engineers be accepted at face value. The points that might be questioned result in only insignificant differences in the final results.

The progress made in reaching the expected rates of furnace output for 320-ton heats at the one-thousand-gallon firing rate are convincing, and these standards are recommended for acceptance.

It is recommended that judgment be withheld in the case of the standards for the twelve-hundred-gallon-per-hour firing rate.

There has been no demonstration that the departmental services are adequate for the operation of seven furnaces simultaneously. Unprejudiced acceptance of the expected seven-furnace output is hardly justified by the experience.

With the exceptions noted, it is recommended that the Company position be upheld in this case.

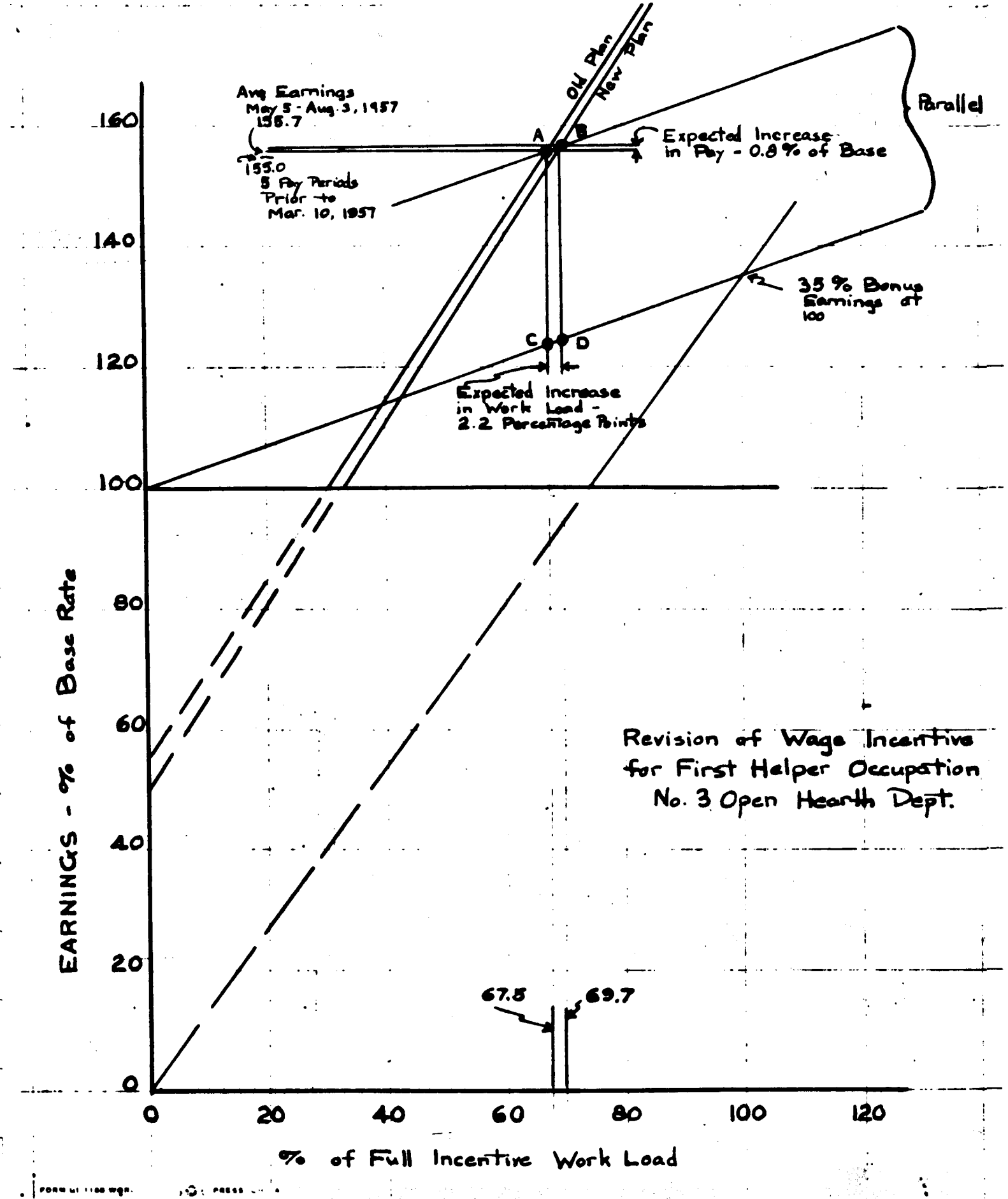
Paul M. Edwards

September 17, 1958 Paul M. Edwards, Professional Engineer

INLAND STEEL - No. 3 OPEN HEARTH

CHART I

Arbitration of Grievance No. 22-F-38-Inland Steel vs. United Steelworkers



Revision of Wage Incentive for First Helper Occupation No. 3 Open Hearth Dept.

B. Grievance No. 22-F-28

Docket No. IH 292-285-4/9/58

Arbitration No. 282

Hot Metal Distributor

The Consultant's report on the technical aspects of this case are set forth below as Exhibit B.

The findings and recommendations in the Consultant's report are sound, consistent with the views expressed in the Permanent Arbitrator's prior awards in incentive cases, and are hereby made a part of this award.

In further illustration of the points made in the Edwards report it might be profitable to compare production and earnings in the "reference period" with those in the pay period ending May 31, 1958. Thus, the Hot Metal Distributor whose incentive earnings are measured by departmental production had average hourly earnings of $2.823 for the 90 day period prior to the installation of the incentive plan. During this time the average production per pay period was 37,300 tons. These earnings were exceeded in all but one of the pay periods in 1957 ending September 7 to December 28, 1957 during which there were 5 or 6 furnace operation. Starting with the pay period ending January 11, 1958 through the pay period ending June 28, 1958 (during which there were 10 pay periods with only four furnace operation and three pay periods with five furnace operation) the average earnings consistently fell below $2.823 in the reference period although the work load rose or at worst remained at the same level. Parenthetically, it may be noted that production was higher in all these later pay periods. The following table will illustrate how the earnings deteriorated.

	Reference Period	Pay Period Ending 10/19/57	2/8/58	5/17/58	5/31/58
Av. No. of Furnaces	4	6	4	4	5
Earnings	$2.823	$2.898	$2.735	$2.721	$2.817

However equitable the earnings relationship may be in the event of a six or seven furnace operation after experience has been acquired and a normal plateau of efficiency achieved, these figures raise a serious question whether the standards in the Agreement are being met during periods of four or five furnace operation. Thus, comparing two periods of 4 furnace operation (the reference period and the pay period ending February 8, 1958), although 4,022 more tons were pro-

duced, the Hot Metal Distributor received $.089 less under the plan than in the reference period. The factors of upgrading, inexperience, et cetera referred to as explaining, in part, the vagaries in the earnings tables in the Furnace Crew and in other cases seem not to be operative or significant with respect to the Hot Metal Distributor.

Under these circumstances the standard of equitable relation with previous earnings clearly requires appropriate adjustment in the incentive rate.

AWARD

The grievance is upheld. The Company, under the procedure set forth in Article V, Section 5 of the Agreement shall present a new revised incentive plan to the Union which shall satisfy the standards set forth in that Section, as recommended in the report of the Consultant attached hereto.

EXHIBIT B

PAUL EDWARDS & ASSOCIATES

CONSULTANT'S REPORT TO ARBITRATORS
on
INLAND STEEL COMPANY - UNITED STEELWORKERS OF AMERICA
ARBITRATION OF GRIEVANCE NO. 22-F-28
(HOT METAL DISTRIBUTOR)

Comments on the Union Case

The basic Union contention in this case is based upon the employee work load. The Union does not state what it believes the work load to have been, but it does base its contention upon the fact that in increasing the size of the open hearth shop from four to sever furnaces with approximately the same time per heat anticipated the number of heats will go up by 75 percent. Therefore, the Union infers that the work load of the Hot Metal Distributors would also go up approximately 75 percent.

It is understood that the same number of hot metal ladles are handled per 320-ton heat as were formerly handled for the 299-ton heats. The work of the Hot Metal Distributor is approximately the same per ladle of hot metal. However, there are some other parts of the work in which the increase is not in direct proportion to the number of heats. For instance, the Company data points out that the daily operation of calculating the hot metal requirements does not materially change because of the increase in tonnage. Also, there is an additional helper scheduled for five-, six-, and seven-furnace operation; and it is incontestable that some of the additional work load will be assumed by the additional helper.

The Union says that at no time during the period shown in their exhibit did the employee even approach the expectancy shown by the Company. The period which the Union shows was entirely one of four-furnace operation. It will be noted that during those pay periods ending from September 7 to December 28, when five and six furnaces were operating, the Hot Metal Distributor did exceed the reference period earnings of $2.823. The Union says there was no change made in the furnace which would tend to lower the work load of these employees. Also, there were no changes made in their jobs to lessen the work load of the Hot Metal Distributors.

Comments on the Company Case

The Company states that their industrial engineers measured the work load under the conditions prior to the changes at four-furnace operation. They found a work load of 52 percent for the Hot Metal Distributor at that level of output.

Fifty-two percent multiplied by the 35 percent expected incentive earnings for full work load would indicate 18.2 percent bonus payment as being justified. The crew actually earned 17.6 percent bonus during the reference period, and the Company says that it threw into the adjustment a gratuitous increase in earnings from 17.6 percent to 18.2 percent bonus, an increase of .6 percent of the base rate. The amount of the work load was projected from four-furnace operation to seven. It was computed that at seven-furnace operation the work load of the Hot Metal Distributor would be 66.3 percent.

The Company then established a new incentive plan based on the concept that at seven-furnace operation (actually six and a half average) the Hot Metal Distributor would be working at a 66.3 percent work load. This increase in work load is a result of increasing the number of hot metal charges which the Hot Metal Distributor must supply; but since many of the work elements of the job do not increase as the tonnage or number of charges increases, the Company figured that the work load would increase only from 52 to 66.3, or 14.3 percentage points (an increase over the old work load of 27 percent) and that some of the work load of the Hot Metal Distributor would be reduced by an additional helper when operating five, six, or seven furnaces. The Company figured that at the anticipated seven-furnace work load of 66.3 percent it would be justified in paying 35 percent of this, or 23.2 percent incentive.

Consultant's Opinion

The Company has based an anticipated earning of 23.3 percent on the work load anticipated for seven furnaces, but it has pivoted the entire incentive structure around this one point. There is no claim that once the incentive is installed the pay will vary with the work load. In other words, as the number of furnaces drops back to four, the old four-furnace work load should recur. This was 52 percent and indicated an earning of 18.2 percent bonus. However, with this incentive plan a four-furnace operation would result in the payment of only 13.4 percent bonus because the bonus is based on tonnage and not on work load.

If the No. 3 Open Hearth Shop should operate at seven-furnace operation (actually six and a half) at all times, then the incentive might be considered equitable. However, when the operation drops to four furnaces, the situation has returned approximately to that which existed prior to the change except that the earnings of the Hot Metal Distributors have dropped 4 percent below what they were prior to the change. There is certainly doubt of the equity of this procedure under the terms of the Agreement. The trouble appears to be that the expected incentive earnings are calculated on anticipated work load, but actual earnings are calculated upon tonnage output. In the case of the Hot Metal Distributors, tonnage output is not a true reflection of the work load; and, therefore, the incentive theory is carried out at only one point.

The relationships between the number of furnaces operating, the work load, and the percent bonus are shown on Chart IV. (It is to be noted that the scales are different from those on the charts presented previously, these changes being necessary to show the relationship between earnings and effort in this case.) The earnings normally resulting from the incentive plans, both old and new, are shown as heavy lines, while the amount of effort for the same rate of operation is shown as light dotted lines and is referred to the right-hand scale of work load percentages. The percent of bonus expected (23.2) has been made to fall at the same point as the corresponding work load (66.3) in order to most clearly show the relationship.

It is clearly seen that the earnings expected from the revised incentive plan do not equal the previous earnings at any point reached by the old plan. The exceed them only when the previous work load is substantially exceeded.

There is certainly no guarantee of seven-furnace operation at all times in the future. In fact, since the increase in the number of furnaces, there has been four-, five-, and six-furnace operation but no period of seven-furnace operation.

The equity of the proposal to pay 23.3 percent bonus at the maximum output with 66.3 percent work load can be defended; but it appears necessary to pay 17.6 percent (or 18.2 percent as proposed) at the old job requirement of 52 percent work load. No simple type of incentive plan will fulfill both of these conditions. The consultant does not have the assignment to tell the parties how to design incentive plans. The following remarks are inserted to illustrate the problem rather than to propose a specific solution for it.

1. The old incentive plan might be applied for rates of operation up to and including four furnaces. For operation of five, six, and seven furnaces, an incentive that proportioned the earnings in a straight-line function from the 17.6 percent (or 18.2 percent) at four furnaces up to 23.2 percent at seven-furnace output would seem to fill the requirements of the Agreement.

2. A separate incentive rate carrying out the earnings - work load relationship as set forth by the Company for each number of furnaces in operation could also be designed to provide equitable earnings in relationship to the previous requirement of work load.

It is the recommendation of the consultant that the Company be required to restore the previous earnings when the previous work load is required of the Hot Metal Distributor. At higher work load the 35 per cent bonus earnings - full work load relationship may be used as a guide in setting the amount of earnings expected for intermediate work load requirements.

Paul M. Edwards

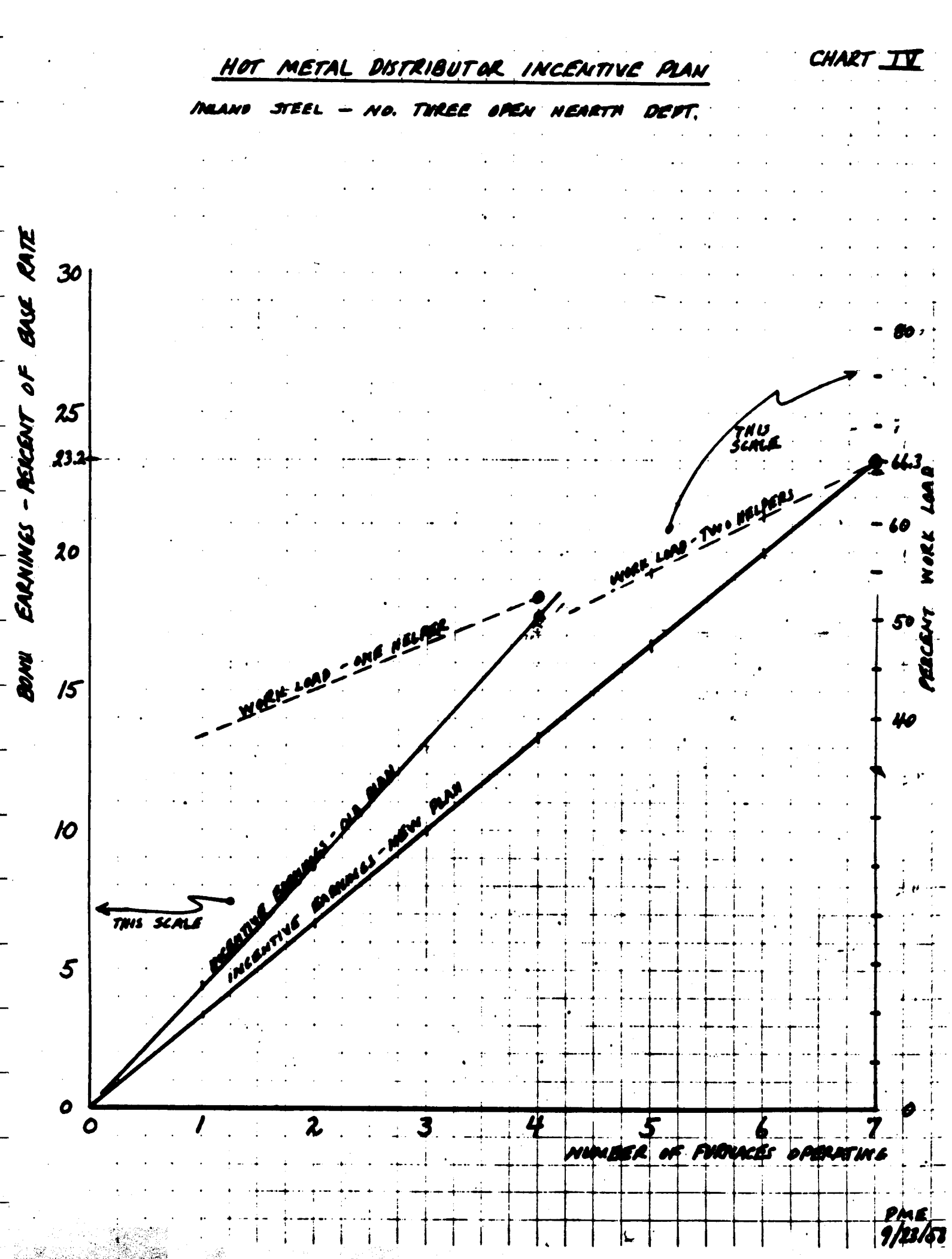
Paul M. Edwards, Professional Engineer

September 24, 1958

HOT METAL DISTRIBUTOR INCENTIVE PLAN

CHART IV

INLAND STEEL – NO. THREE OPEN HEARTH DEPT.



PME
9/23/63

C. Grievance No. 22-F-30

Docket No. IH 293-286-4/9/58

Arbitration No. 283

Charging Car and Ladle Crane Operator

The Consultant's report on the technical aspects of this case are set forth below as Exhibit C.

The findings and recommendations in the Consultant's report are sound, consistent with the views expressed in the Permanent Arbitrator's prior awards in incentive cases, and are hereby made a part of this award.

AWARD

This grievance is denied.

EXHIBIT C

PAUL EDWARDS & ASSOCIATES

CONSULTANT'S REPORT TO ARBITRATORS
on
INLAND STEEL COMPANY - UNITED STEELWORKERS OF AMERICA
ARBITRATION OF GRIEVANCE NO. 22-F-30
(CHARGING CAR OPERATOR AND LADLE CRANEMAN)

Consultant's Comments on the Union Case

The Union expressed grave doubts that the projected tonnage of 74,665 tons per pay period could be produced by the No. 3 Open Hearth with the scheduled five-man crew. The Union also offered testimony to prove that the work load would increase even for the same tonnage output in the seven-furnace department. The longer distances that would have to be traveled by the cranes or the charging cars to serve four furnaces in the seven-furnace shop were offered. Also presented was the testimony that the Ladle Cranemen at times work all of the time, sometimes foregoing needed relief.

The consultant believes that the points made by the Union are material. He finds, however, that they have been compensated for in the revision of the incentive; and, as will be brought out below, the incentive may prove equitable even if the expected tonnage is not attained.

Comments on the Company Case

The Company industrial engineers made time studies of the Charging Car and Ladle Crane operations before the changes from four furnaces to seven and before the change from 299 to 320-ton heats. The work load was projected, element by element, from the 299 to the 320-ton-heat basis. The consultant finds that in so far as observation, testimony, and study of the situation indicate, the projection was fairly made; and it is believed that the increased time allowed for the Charging Car and Ladle Crane Operators per ton of ingots produced is adequate by comparison with the 299-ton-heat operation.

Consultant's Opinion

The incentive plan for the Charging Car Operators and the Ladle Cranemen has been changed very little. The amount of work performed by the men in these positions is a function of both the tons of steel made and of the number of heats that were required to make the steel.

It would be presumed that the amount of work per ton was less with the larger heats. The Company has, however, increased certain elements of work

in its projected change from 299 to 320-ton heats, so that actually more work per ton is allowed in the new incentive for the larger heats.

The average work load found for conditions prior to the change was 70 percent of a full incentive work load. On the Company's 35 percent bonus practice (discussed in the consultant's "Exposition of Incentive Practices"), this would have justified payment of 24.5 percent bonus. Twenty-four and a half percent bonus was actually paid during the three-month period prior to the development of the new rate. While presumed to be a coincidence, the actual incentive fits the Company standard practice. This relationship is shown as the point marked "Prior to Change" on Chart VIII.

The total output of the department was expected to increase 88 percent in the Company figures. However, five men are expected to be used in this group instead of three. The tonnage output per man hour, therefore, would increase only about 13 percent, to the point marked "Expected after the Change" on Chart VIII. The Company says that the average work load would increase 24 percent (16.8 percent of full work load). The difference is caused by the increases in the standard times allowed, as mentioned above.

From the evidence presented, the consultant believes that the adjustments to the allowed times were adequate; in fact, probably rather generous.

Earnings may fall below the previous average but only because (a) the men added to the crew have caused the ingot tons per man hour to be lower than previously, or (b) the output of the furnaces has declined.

The new incentive plan pays slightly more per ingot ton at all levels of production than the old plan.

Some actual payments resulting from the new plan at various outputs (and corresponding work loads) are also shown on Chart VIII as solid dots.

Within the framework of the 35 percent bonus practice the new earnings are held to be equitable in relation to the previous job requirements and the previous incentive earnings.

Paul M. Edwards

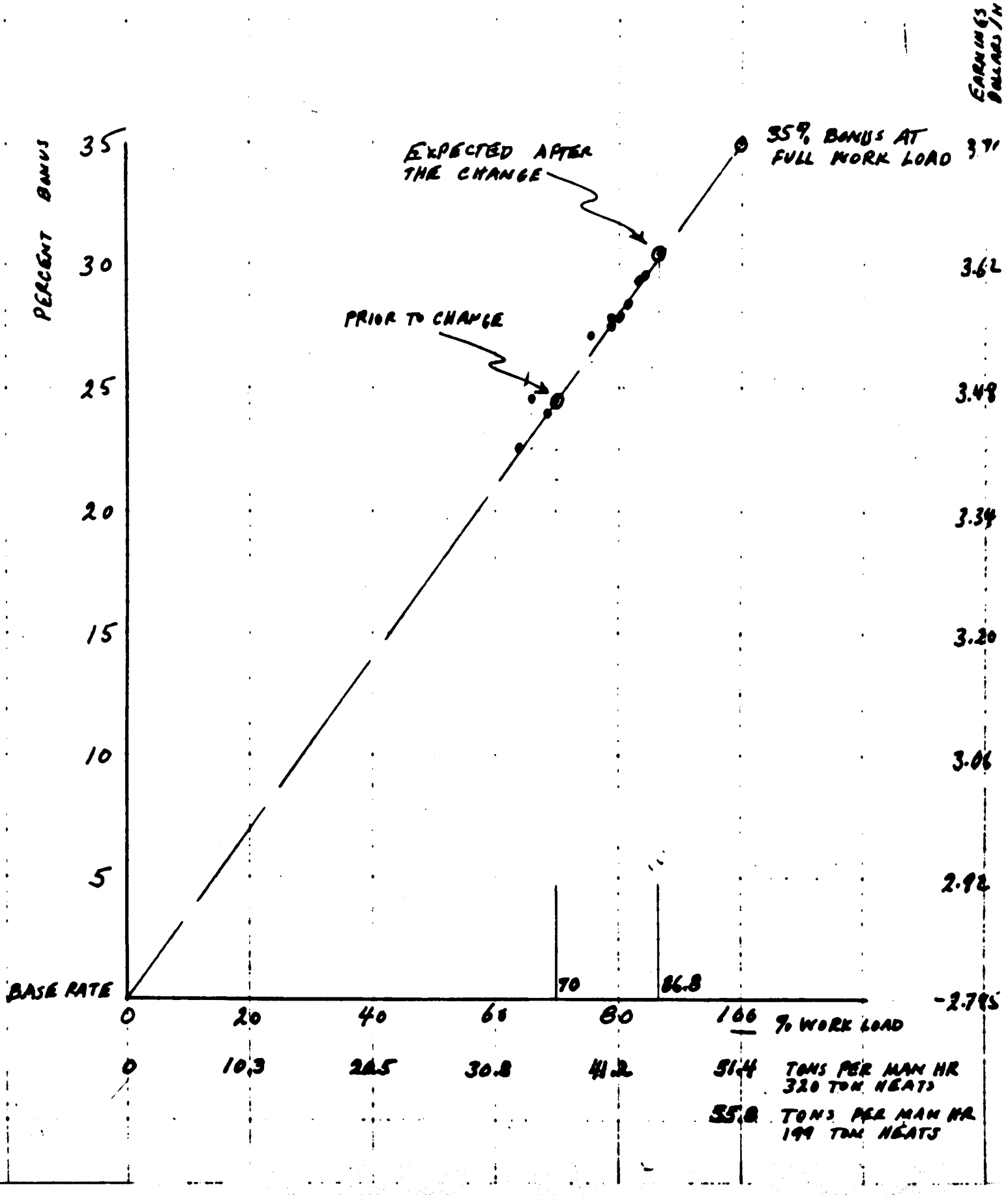
Paul M. Edwards, Professional Engineer

September 29, 1958

CHARGING CAR AND LADLE CRANE INCENTIVE PLAN. CHART VIII

INLAND STEEL CO. NO 3 OPEN HEARTH

• ACTUAL EARNINGS AND WORK LOADS - DATA FROM UNION EXHIBIT I .



D. Grievance No. 22-F-31

Docket No. IH-294-287-4/9/58

Arbitration No. 284

Hot Metal Craneman

The Consultant's report on the technical aspects of this case, together with a chart illustrating his comments, are set forth below as Exhibit D. The comments and conclusions in the Consultant's report are regarded as sound and are hereby made a part of this Award.

This case presents a question that was the subject of the discussion which took place at the hearing on December 6, 1958 subsequent to the date on which the case was originally presented in arbitration. Stated briefly, it is whether the Agreement requires that where an incentive plan becomes inappropriate, the new incentive plan must provide incentive earnings at least equal to those enjoyed under the previous plan despite the fact that additional employees have been added to the crew under circumstances that indicate less incentive effort will have to be put forth in the performance of the jobs.

The Union vigorously takes the position that it was never contemplated that in a new incentive plan replacing one that has become inappropriate due to changes, the incentive earnings might be reduced. It asserts that in cases arbitrated prior to the present Permanent Arbitratorship, the Company's position was inconsistent with that it presently maintains. The Union points to the average hourly guarantee (Marginal Paragraph 58) as evidence that a floor of earnings was intended when a new incentive plan is substituted for an incentive plan previously in effect.

The Company, for its part, stressed the point that incentive plans were intended to compensate for incentive effort (Marginal Paragraph 52) and that incentive earnings under a plan are required to be equitably related to previous job requirements and previous incentive earnings. Thus, says the Company, where changes have rendered a plan inequitable, it is appropriate to measure and evaluate the effects of the changes to the end that the incentive earnings yielded by the new plan will be equitable in relation to previous job requirements and previous incentive earnings. This is done, according to the Company, by resorting essentially to work load studies. It regards this as consistent with the term "job requirements" as used in Article V, Section 5. Thus, when the "work load" has been increased by the change, an upward adjustment of rates, asserts the Company, is indicated; contrariwise, when the work load studies disclose a diminution of "work load", indicating that less incentive effort need be put forth, a downward adjustment of earnings is appropriate. The Company notes in this connection

that measurement of job requirements is discussed by it with reference to the incentive effort required to be put forth over and above what is compensated for in the base rate and there should be no confusion between "job content" as used for base rate determinations (Article V, Section 6) and "job requirements" as used in Article V, Section 5.

The responsibility of the Permanent Arbitrator here is to interpret and apply the provisions of the Agreement in a reasonable manner. The words the parties have placed in the Agreement are the best evidence of their intentions. Where there is a lack of clarity then observations made by other arbitrators in a different context, or the arguments advanced by the parties, may be helpful, but basically the provisions of the Agreement are controlling.

A careful study of Article V, Section 5 persuades that where "new or changed conditions" within the meaning of Marginal Paragraph 59 occur and the previous incentive plan is alleged or conceded (as in this case) to have become inappropriate, there should be a "new incentive" conforming to four standards expressed therein. For the purposes of this case we shall refer only to the requirement that in the light of the new or changed conditions the new plan must provide "equitable incentive earnings in relation to * * * the previous job requirements and the previous incentive earnings" (Marginal Paragraph 59). The total meaning of "job requirements" is not apparent; it is a general and imprecise term. This was discussed by the Permanent Arbitrator at some length on pages 4 and 5 of Case 156. Therefore, it should be open to the parties at any time to enlighten the Arbitrator as to what it comprehends in a particular case. In any event, the problems presented in this case do not seem to require a treatise on what is included in the term. On the other hand, the word "equitable" and the term "incentive earnings" and "previous incentive earnings" are believed to be well understood. These features have been commented on in a number of prior awards.

Thus, it is the duty of the Arbitrator to assure that whatever the new incentive plan provides as incentive earnings shall be "equitable" in relationship to what the old plan yielded as incentive earnings for the job requirements which were extant before the new or changed conditions. This calls for a broad exercise of discretion inasmuch as the term "equitable" instructs us that the parties did not intend that new incentive earnings should either increase or decrease in direct and precise proportion as new or changed conditions are held to affect the job requirements. See discussion of this in Cases 151 and 156.

There is general agreement that where the new or changed conditions resulted in increased job requirements, the new incentive plan should produce incentive earnings greater than did the old plan to an equitable degree. Marginal Paragraph 59, however, does not concern itself with whether the job requirements were increased or decreased: it does not state that it applies only to increases

in the job requirements. It provides a formula for application to the facts of a case, whatever they may be.

When we look elsewhere in the Agreement, we find no mandate which is inconsistent with this normal reading of Marginal Paragraph 59. Paragraph 58 (the guarantee of average hourly earnings) deals with a specific situation. It does not purport to state what the new incentive plan should yield in earnings; rather it is limited at most to the proposition that until a dispute on a new incentive plan is resolved, the employees are to be protected by guaranteeing them their earnings level under the old incentive plan. It may well be asked why this guarantee is provided. Certainly, there would be no need for such a guarantee if the Union were satisfied that the new incentive will yield earnings greater in appropriate degree and extent than those produced under the old plan.

It seems more reasonable to conclude that the guarantee was legislated to protect the employees in the situation in which, because the job requirements had been reduced as a result of the new and changed conditions, the incentive plan would yield lesser incentive earnings than the previous plan had yielded. In such an instance, plainly, the employees have an important reason to maintain the status quo in incentive earnings until the Arbitrator can determine whether or not the job requirements were, indeed, reduced, and whether the equitable balance required in the Agreement has been maintained.

Thus, the Arbitrator reaches the conclusion that whatever may be the total content of "job requirements" and whatever other ambiguities may exist in Article V, Section 5, it is the duty of the Arbitrator to apply the standards and the formula of Marginal Paragraph 59 as he finds them. This means that when a new incentive plan is being reviewed, one must see whether it will yield incentive earnings which are equitable in relation to the previous job requirements and the previous incentive earnings, or to the other standards set forth in Section 5. This is so regardless of whether that relationship will result in increased or decreased incentive earnings under the new plan.

In the instant case the Company elected to assign two Cranemen for almost all of the turns since the installation of the incentive plan when four, five or six furnaces were operated. Obviously the introduction of another crane reduced the job requirements as was shown on the work load studies submitted by the Company and discussed in the Consultant's report. It also had the effect under the installed plan of reducing the incentive earnings per man. The data in that report and the whole record of the case support the conclusion that the standards in Marginal Paragraph 59 have been met.

AWARD

This grievance is denied.

EXHIBIT D

PAUL EDWARDS & ASSOCIATES

CONSULTANT'S REPORT TO ARBITRATORS
on
INLAND STEEL COMPANY - UNITED STEELWORKERS OF AMERICA
ARBITRATION OF GRIEVANCE NO. 22-F-31
(HOT METAL CRANEMEN)

Consultant's Comments on the Union Case

The Union states that during the base period which determined the average earnings of the Hot Metal Cranemen the average earnings were $3.089 per hour for a production of forty thousand tons of ingots for the shop (later corrected to 37,300 ingot tons). The Union points out that even though production rose to 52,406 tons, the Cranemen's earnings were $2.940 per hour, a loss of $.149 per hour. The Union further points out that Craneman earnings since the new incentive was installed have dropped as low as $2.845 per hour, even though the shop tonnage increased to 41,322 tons. Even when serving four furnaces, the same number operating before the change, and producing thirteen hundred tons more than before the change, the Cranemen lost $.245 per hour.

The Union brought out that whereas one Hot Metal Craneman was employed per shift in the old shop when four furnaces were operating, now in the new shop two Hot Metal Cranemen are employed even though only four furnaces are operating.

The Union claims that even though seven furnaces were operating with an increase of 88 percent in output of ingots for the shop, the earnings of the Hot Metal Cranemen would not be as high as they had been in the old shop with four furnaces.

Testimony was presented as to increased work load, particularly in connection with filling the dolomite machine and the handling of spouts.

In analyzing the effect of the change upon the earnings of the Hot Metal Cranemen, it is true that the total tons produced is a significant figure. However, it must also be noted that it is not the only significant figure. It is earnings and job requirements in relation to previous earnings and job requirements that must be considered. Tons produced in the shop is certainly a reflection of job requirements; however, the amount of work which the Hot Metal Cranemen must do per ton produced and the number of Hot Metal Cranemen among whom that work was divided are also significant factors. These will be considered in the consultant's analysis.

Comments on the Company Case

The Company submits time study data which indicates an increase in the standard hours of work of the Hot Metal Cranemen per heat from 1.5723 for the 299-ton heat to 1.6235 for the 320-ton heat under the conditions existing after the physical arrangements of the shop were changed. This represents an increase of slightly more than three percent where the size of the heat was increased by 7 percent. When reduced to amount of work per unit of output, it is found that the standard hours per one hundred tons of ingot output has been reduced from .526 to .507 per one hundred tons, a reduction of about three and a half percent in work load per hundred tons. This change appears to be logical in the light of the fact that the same number of ladles of hot metal are poured into a furnace for each heat.

Apparently the management has made the decision that with a three percent increase in work load it is now desirable to staff the department with two Hot Metal Cranemen per shift. At least two Cranemen have been used per shift since the new facilities went into operation and while the shop had four, five, and six furnaces operating.

The management agrees that the earnings have been lower at all times with the new conditions than with the prior conditions, even though five and six furnaces were operating at times. During the three months prior to the development of the rate, 26.1 percent incentive margin was earned (Company Exhibit D), while during the period from its installation in August, 1957, to the pay period ending June 28, 1958, a margin of only 17.5 percent was earned. From the calculations it is obvious that this reduction in earnings is due in part to the fact that the standard hours of work per hundred tons of ingots produced has been reduced as a result of the Company's finding that the amount of effort per one hundred tons of ingots produced is lower than prior to the change by the three percent mentioned. The big difference, however, has been the fact that since the installation of the second hot metal crane two Cranemen have been assigned to the crew per turn almost continually.

Consultant's Opinion

The data provided by the parties, Union Exhibit 1 and Company Exhibit F, have been plotted in two different forms. Chart IX shows the earnings as a percent of the base rate compared to the percent of full incentive work load. What the Company refers to as its "standard incentive practice" is shown as the Line F, running from no bonus at zero work load to 35 percent bonus at 100 percent of full incentive work load. As a result of the time studies, the Company says that it

found a work load during the base period of 61.5 percent, with an earnings of 26.1 percent. This condition is plotted as the point "base period" on Chart IX (Note 1 on Chart X). The Company states in its brief (pages 6 and 7) that the assignment of two cranemen to the hot metal cranes would result in a decrease in work load compared to the old conditions, even when seven furnaces were operating at normal output. Rather than cause a decrease in earnings because of this drop of five percentage points in the work load, the Company "loosened" the incentive plan so that at the expected output of seven furnaces and two cranemen assigned the earnings would be the same as those during the base period. The point of the expected earnings with two cranes and the 56.4 percent work load is shown on Chart IX marked "expected-two cranes, seven furnaces." Now, if it had been possible to operate with one craneman assigned up to four-furnace operation, there might have been an increase in earnings, as shown by the point "expected-four furnaces, one crane." Of course, if two cranemen are assigned when only four furnaces are operating, the amount of work available for each man will be only half of that for one and the bonus margin paid above the base rate will be half of that for one craneman. This condition is shown as the point marked "expected-four furnaces, two cranes." It shows on the chart as 17.5 percent, which is exactly what was earned on the average since the new incentive went into effect.

The same data has been shown directly against ingot production in thousands of tons per pay period and the resulting earnings in dollars per hour on Chart X. The expected earnings at various levels of production are shown by the two lines marked "earnings-one craneman" and "earnings-two cranemen." The actual earnings during the base period and since the new incentive has been installed are shown as small circles, with notes explaining those that do not fall on the "two cranemen" line.

Conclusion

The Company applied its "Standard Wage Incentive Practice" and then increased the earnings slightly above those indicated by it, so that there was an expectation of increased earnings at both the four-furnace and the seven-furnace level of operations under the new conditions. This is on the assumption that one craneman would be assigned for four-furnace operation as in the past. There would have been a reduction in earnings for five and six-furnace operation if two cranemen were assigned for these conditions, as was stated to be the management intention.

However, the management assigned two cranemen to work when four furnaces were in operation, and a decrease in earnings resulted. It must be

remembered that a comparable decrease would have resulted under the old plan if the same action had been taken.

An attempt has been made to set out the significant facts in tabular form on the attached sheet.

Paul M. Edwards, Professional Engineer

December 1, 1958

INLAND STEEL COMPANY - UNITED STEELWORKERS OF AMERICA ARBITRATION
GRIEVANCE NO. 22-F-31
EARNINGS OF HOT METAL CRANEMEN
ACTUAL AND PROJECTED FOR VARIOUS CONDITIONS

	Heat Size	Tons Per Pay Period	1 Craneman Per Turn		2 Cranemen Per Turn		As the Plan Was Understood by the Union 1 Craneman for 4 Fces. 2 Cranemen, 5-7 Fces.		As the Plan Actually Did Work 2 Cranemen, 4-7 Fces.	
			Work Load	Earnings Per Hour	Work Load	Earnings Per Hour	Work Load	Earnings Per Hour	Work Load	Earnings Per Hour
1. Four furnaces - old plan.	299	37,300	61.5%	$3.089	30.8%**	$2.787**	61.5%	$3.089	61.5%	$3.089
2. Four furnaces - new plan.	320	40,000	64.4%	$3.178	32.2%	$2.831	64.4%	$3.178	32.2%	$2.831
3. Percent increase from old plan.	7%	7%	4.7%	2.9%	4.7%	1.6%	4.7%	2.9%	(-47.6%)	(-8.4%)
4. Seven furnaces - new plan.	320	74,665	112.8%*	*	56.4%	$3.134	56.4%	$3.134	56.4%	$3.134
5. Percent increase from old plan.	7%	100%	*	*	83.0%	12.5%	(-8.3%)	1.5%	(-8.3%)	1.5%

* Work load for this condition would be so high as to be unattainable or impractical.

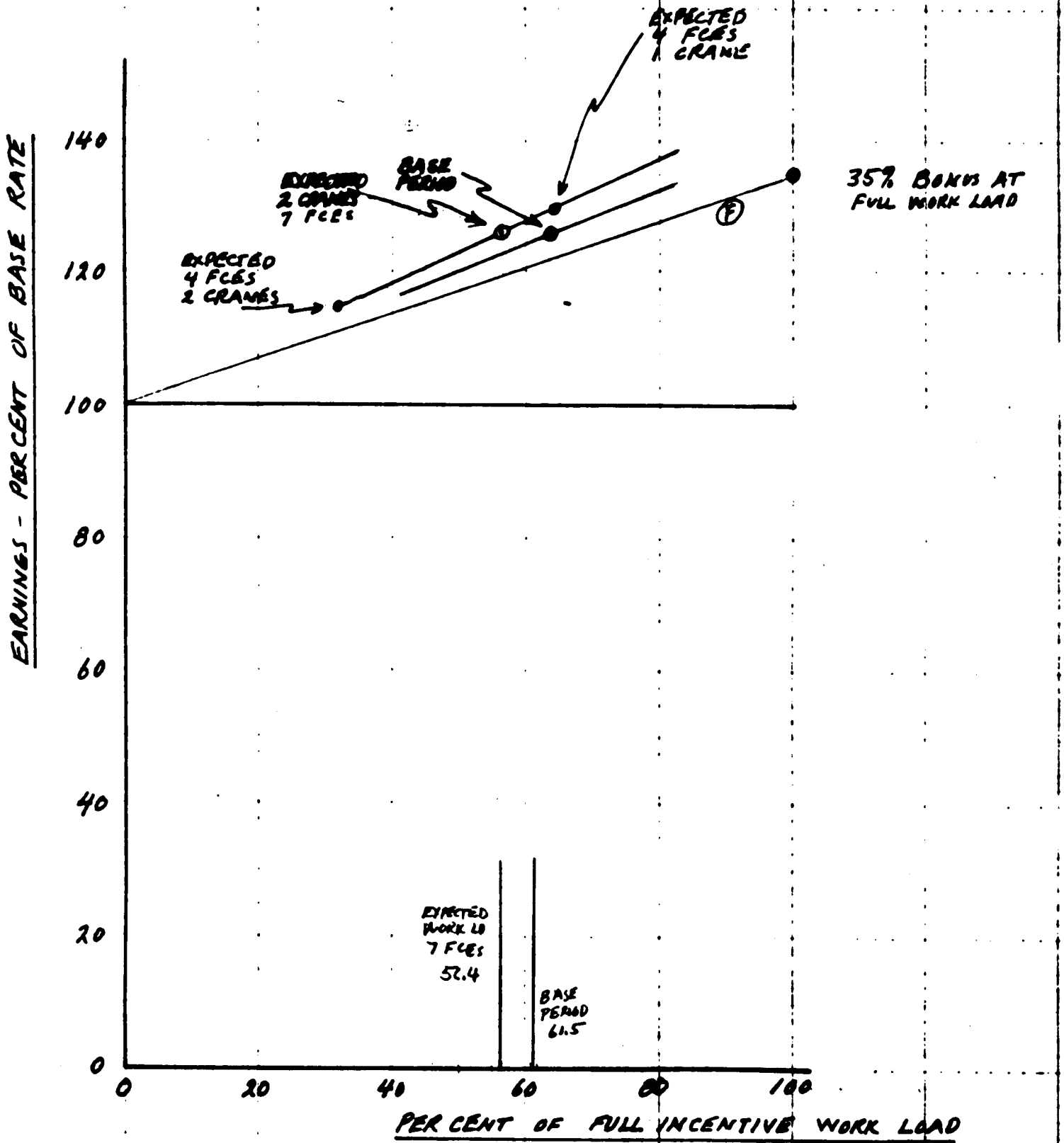
** This condition never actually occurred. Probable earnings have been computed by splitting the incentive margin between two cranemen.

December 1, 1958

HOT METAL CRANEMEN

INLAND STEEL - No 3 OPEN HEARTH

CHART IX



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10-3-

HOT METAL CRANEMEN

CHART I

INLAND STEEL - USWA - 22-F-31

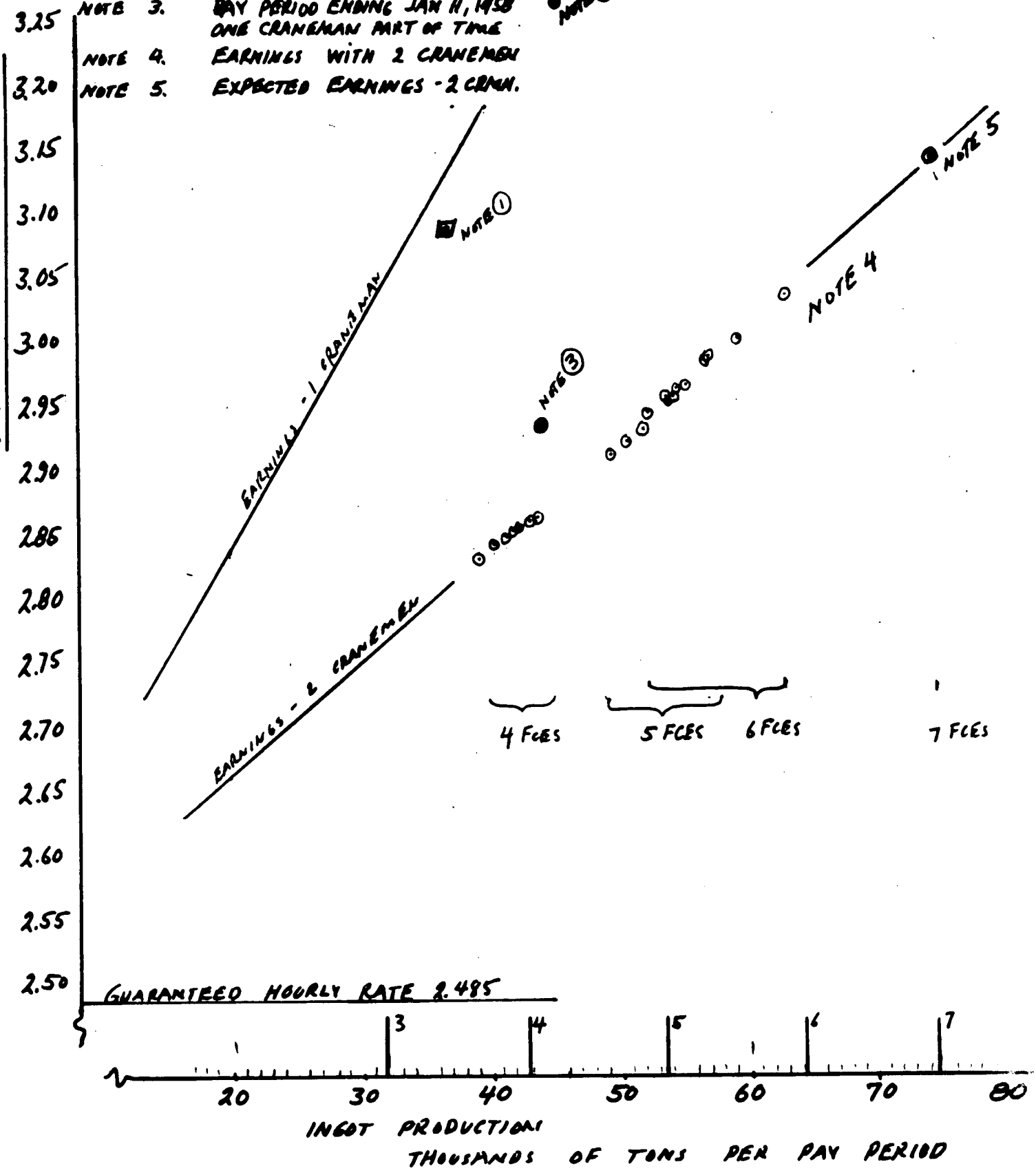
NOTE 1. BASE PERIOD - 4 FCES OPERATING

NOTE 2. ONE WEEK - AVG 10,1687

NOTE 3. PAY PERIOD ENDING JAN 11, 1958 ONE CRANEMAN PART OF TIME

NOTE 4. EARNINGS WITH 2 CRANEMEN

NOTE 5. EXPECTED EARNINGS - 2 CRMN.



PME
10-3-58

E. Grievance No. 22-F-34

Docket No. IH 295-288-4/9/58

Arbitration No. 28

Stripper Craneman

The Consultant's report on the technical aspects of this case are set forth below as Exhibit E.

The findings and recommendations in the Consultant's report are sound, consistent with the views expressed in the Permanent Arbitrator's prior awards in incentive cases, and are hereby made a part of this award.

AWARD

The grievance is upheld. The Company, under the procedure set forth in Article V, Section 5 of the Agreement shall present a new revised incentive plan to the Union which shall satisfy the standards set forth in that Section as recommended in the Consultant's report.

EXHIBIT E

PAUL EDWARDS & ASSOCIATES

CONSULTANT'S REPORT TO ARBITRATORS
on
INLAND STEEL COMPANY - UNITED STEELWORKERS OF AMERICA
ARBITRATION OF GRIEVANCE NO. 22-F-34
(STRIPPER CRANEMAN)

Consultant's Comments on the Union Case

The Union presented figures showing that at increased tonnage output and correspondingly increased work requirement the earnings of the Stripper Cranemen actually decreased. The additional fact presented that an 88 percent increase in production stripped by the same number of cranemen would result in an increase of only 22.9 cents per hour or an 8.2 percent increase in pay over previous earnings cannot be accepted as proving that an inequity exists. However, the Union appears to show that the incentive earnings for previous tonnages are not equitable in relation to previous incentive earnings and previous job requirements.

Comments on the Company Case

The Company says that the previous incentive earnings were 3.2 percent higher than would be indicated by their "Standard Incentive Practice" (28 percent work load x .35 = 9.8 percent, compared to actual incentive earnings of 13 percent in the base period).

The Company projected the observed work load from the 28 percent at 39,300 calculated ingot tons per pay period at four-furnace capacity to 52.3 percent work load at the expected full production of 74,665 tons. The tonnage increases 90 percent (from 39,300 to 74,665 tons), while it is expected that the amount of work will increase about 87 percent (52.3 ÷ 28 = 187). Since there are certain duties that are not related directly to the number of ingots stripped, the difference between the increase in tonnage and increase in work load appears to be reasonable and is accepted.

The Company calculates the amount of incentive earnings justified by their "Standard Incentive Practice" at 18.3 percent of base rate (52.3 x .35). To this percentage was added the 3.2 percent that the old incentive was "high." This procedure indicates an expected incentive margin of 21.5 percent at 74,665 tons. This is held to be equitable in relation to previous incentive earnings and previous job requirements.

Consultant's Opinion

The Company contention that the expected earnings are equitable could be supported if there were a guarantee that tonnage would always be at or near the seven-furnace level. However, examination of earnings at all levels indicates that at previous job requirements the previous incentive earnings will not be received.

Chart No. XI shows the relationship of earnings to work load (and tonnage) for both incentive plans. Point "A" represents this relationship for the base period. Point "B" represents the earnings at the capacity tonnage of 74,665 and 52.3 percent work load. The new incentive plan is based on Point "B" and is not a "steeper" pay line, as mentioned in testimony, but is actually a "flatter" one. The small dots represent actual earnings since the new incentive was installed. It indicates that there will be a reduction in earnings at the previous tonnage, which reflects previous job requirements.

Actual earnings were $2.793 per hour for 37,300 tons. New incentive earnings would be $2.753 for 37,300 tons. This is a reduction of $.04 per hour for work requirements, practically identical to the "previous job requirements."

Recommendation

To comply with the criteria of the Agreement, the Company should revise the incentive plan so that $2.793 per craneman hour will be earned when 37,300 ingot tons are produced per pay period. Earnings of $3.022 per hour appear equitable for production of 74,665 ingot tons per pay period.

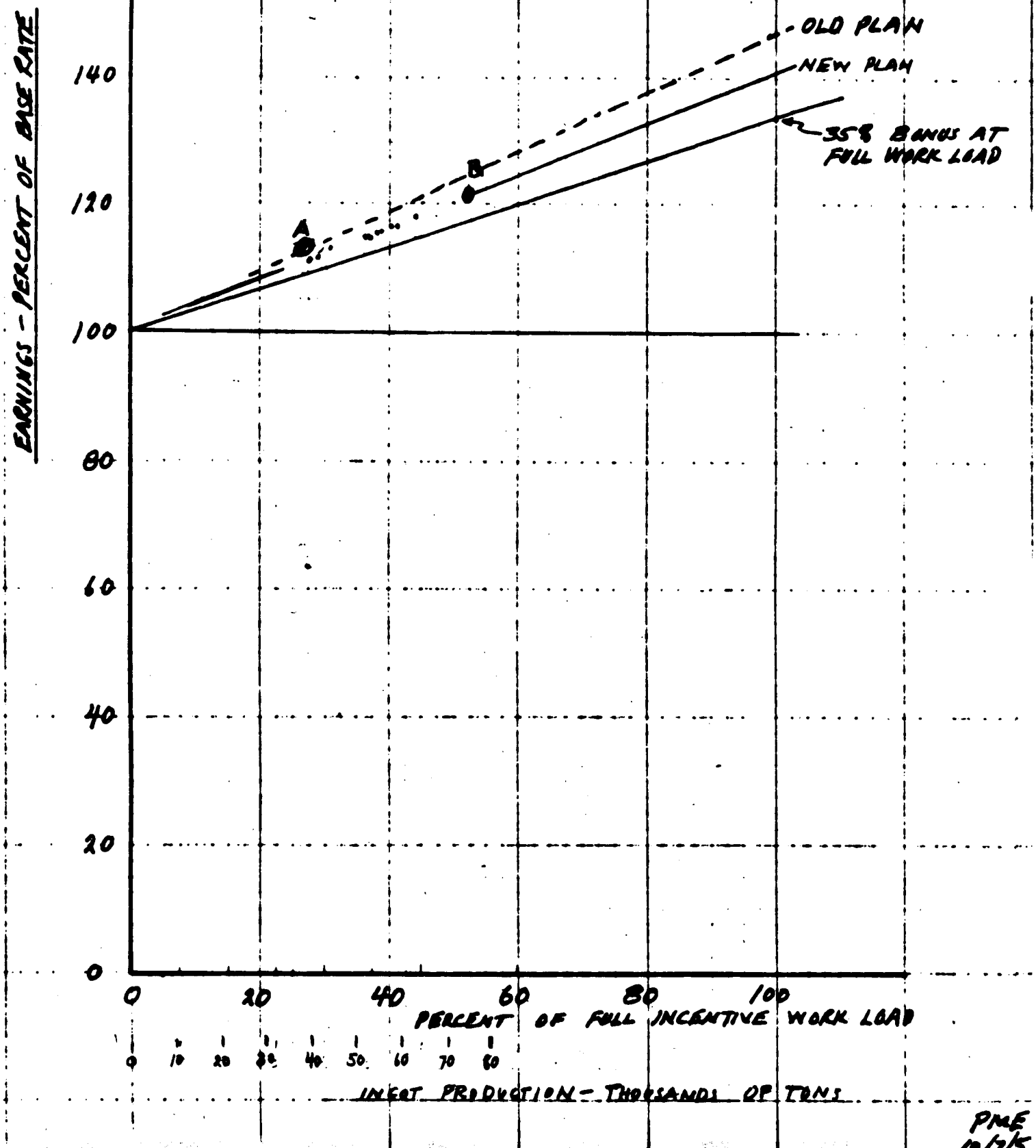
Paul M. Edwards

Paul M. Edwards, Professional Engineer

October 10, 1958

STRIPPER CRANEMEN - INCENTIVE PLAN CHART I

INLAND STEEL - NO 3 OPEN HEARTH



PME
10/2/5

F. Grievance No. 22-F-27

Docket No. IH 291-284-4/9/58

Arbitration No. 286

Scrap Yard Craneman

The Consultant's report on the technical aspects of this case, together with a chart illustrating his comments are set forth below as Exhibit F.

The findings and recommendations in the Consultant's report are sound, consistent with the views expressed in the Permanent Arbitrator's prior awards in incentive cases, and are hereby made a part of this case.

AWARD

The grievance is denied.

EXHIBIT F

PAUL EDWARDS & ASSOCIATES

CONSULTANT'S REPORT TO ARBITRATORS
on
INLAND STEEL COMPANY - UNITED STEELWORKERS OF AMERICA
ARBITRATION OF GRIEVANCE NO. 22-F-27
(SCRAP YARD CRANEMAN)

Consultant's Comments on the Union Case

The Union contends that the earnings of the Scrap Yard Craneman under the revised incentive plan have not maintained a proper relationship to the increased work load. The revised incentive plan is based on an anticipated 88 percent increase in production, which the Union doubts will be realized. The Scrap Yard Cranemen have not attained the expected $2.854 per hour earnings from the incentive. With increased output of the No. 3 Open Hearth Department the earnings have at times been below those received prior to the addition of three furnaces to the department.

Comments on the Company Case

From time studies the Company found 3.27 standard hours of work per heat of 299 tons. It was then calculated that the 320-ton heat would require 3.41 standard craneman hours of work. (The heats increase 7 percent in size; the crane work goes up 4.2 percent with 2.8 percent of the work, "load by bucket," removed from the craneman duties. The full 7 percent increase in amount of scrap handled is thereby accounted for in the work load figures.)

The Company computes that full seven-furnace operation with 320-ton heats will increase the craneman's work load from 64.1 percent to 78.9 percent of full work load, an increase of 14.8 percentage points. Applying its 35 percent incentive earnings practice, an increase of 5.2 percent of the base hourly rate is indicated.

During the base period the cranemen were actually earning 25.4 percent above their base hourly rate. This compares with 22.4 that would result from the application of the 35 percent practice to their work load.

The Company provided for increasing the craneman earnings 5.2 percent, thereby arriving at 30.6 percent incentive margin where 27.6 would have been computed from the projected work load for the new conditions. Thus, the increment by which the incentive earnings had exceeded those called for by the 35 percent practice was maintained.

Consultant's Opinion

The earnings for actual periods have been plotted against the ingot tons per pay period on Chart No. VII. The point marked "A" is computed from the Union's Exhibit I ($2.701 per hour for 37,300 tons with two cranemen per turn). The point marked "B" is taken from the Company Exhibit D, showing the data for the three months prior to development of the rate. (Seven pay periods, an average of 39,700 tons per pay period, and earnings of $2.735 after adjustment for the general wage increase of July 1, 1957.)

These two points indicate the line on which the earnings for any other period could be found prior to the revision.

The Lines "C" and "D" are plotted through the points representing actual earnings for various periods after the revision. It is about 1.5 cents per hour less than the prior earnings for the same tons of ingots per craneman hour.

The Scrap Yard Crane job was relieved of the work "load by bucket" at the time of the changes in the department. The work was transferred to a raw materials crane in the new bin building. This represented a reduction in work load, all other things remaining unchanged, of 1.8 percent of a full work load (2.8 percent of the work being done).

Applying the Company's 35 percent earnings practice would warrant a reduction of 0.6 percent of the base rate in the job earnings from this change. This percentage of the base rate ($2.185) is $0.0135 per hour. The actual reduction that occurred in the earnings at a given production rate per craneman hour is the same, as nearly as can be determined from the figures.

To summarize:

1. An increase in the craneman's earnings has been provided equivalent to 35 percent of the increase in the work load. This conforms to the Company's "Standard Incentive Practice," which has been discussed in a general review.

2. The work load varies directly with the output of ingots per craneman hour.

3. The incentive has been adjusted for the reduction in work load resulting from relieving the Scrap Cranemen of "loading by bucket."

4. The earnings above the base rate (the "incentive margin") were slightly higher than the "Standard Incentive Practice" would indicate. This increment has been maintained in the new incentive.

Recommendation

With acceptance of the work-load method of determining incentive earnings and the 35 percent margin at full work load, the Scrap Craneman's incentive plan, as revised, is considered completely equitable. It is equitable in terms of these criteria even though the expected total tonnage was not achieved, and its equity is not affected by size of heat or firing rate.

Paul M. Edwards

Paul M. Edwards, Professional Engineer

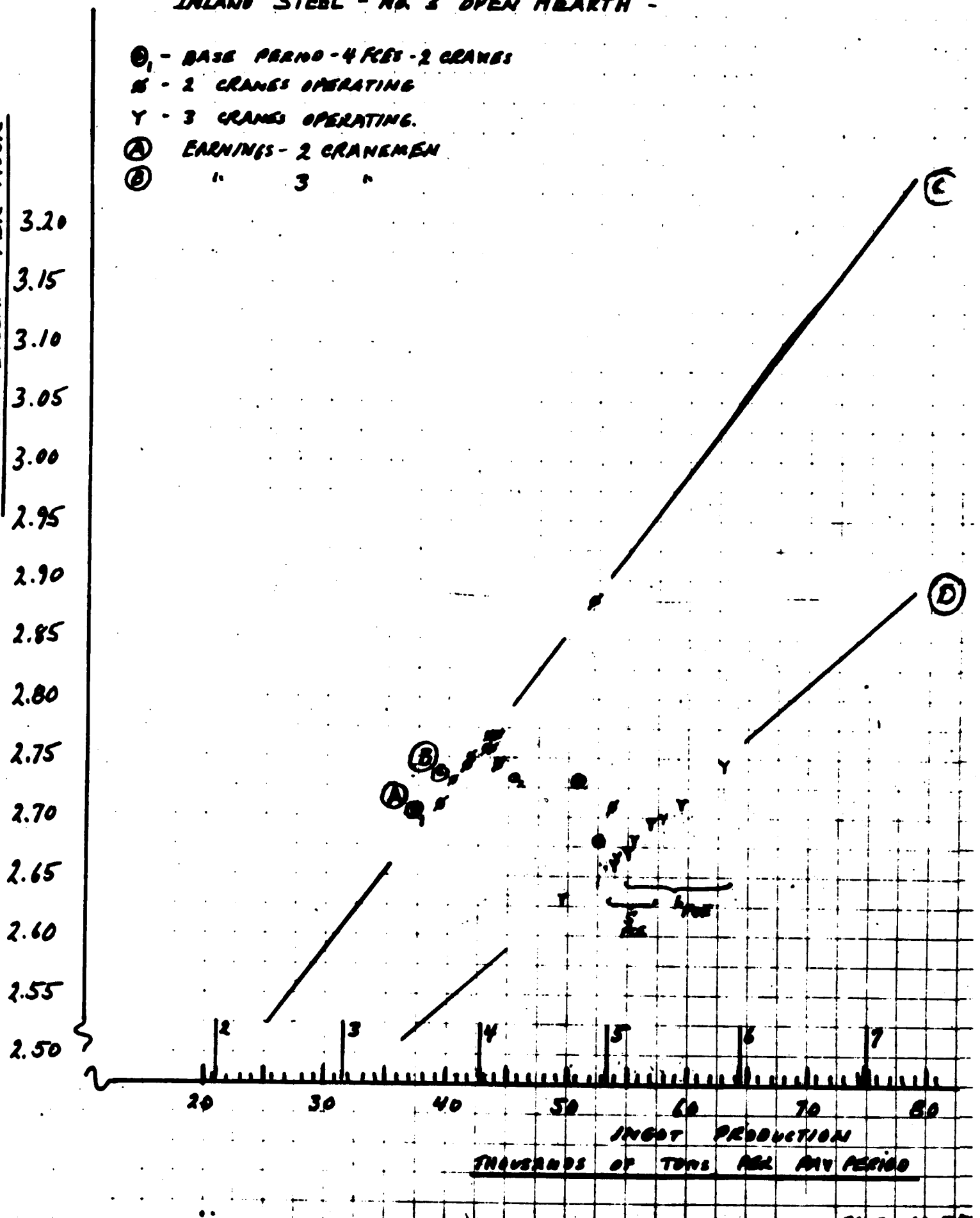
October 14, 1958

SCRAP YARD CRANEMEN - INCENTIVE PLAN

CHART VII

INLAND STEEL - NO. 3 OPEN HEARTH -

Θ_1 - BASE PERIOD - 4 FCES - 2 CRANES
Θ - 2 CRANES OPERATING
Y - 3 CRANES OPERATING.
Ⓐ EARNINGS - 2 CRANEMEN
Ⓑ " 3 "



G. Grievance No. 22-F-36

Docket No. IH 296-289-4/9/58

Arbitration No. 287

Payloader Operator

The consultant's report on the technical aspects of this case are set forth below as Exhibit G.

The findings and recommendations in the Consultant's report are sound, consistent with the views expressed in the Permanent Arbitrator's prior awards in incentive cases, and are hereby made a part of this award.

The time study data on the basis of which the plan was developed was gathered in the course of a three turn study on December 20 and 21, 1956. This data was projected to levels of operation and sizes of heats expected under the changed conditions. The Company reasonably might have reached the conclusion that its work-load computations were sufficiently accurate not to justify a check study. The testimony adduced at the hearing, however, as to present banking practices for the old furnaces, the cleaning up work and the extent to which assistance is available from a Labor Payloader raised questions as to the work-load computations under the changed conditions that need to be answered more satisfactorily than by mathematical projection. This is also true as to the offset in work-load claimed by the Company by reason of a more convenient arrangement of bins and payloading procedures generally. In this connection reference is made to Arbitration No. 156 in which the Permanent Arbitrator commented:

> "* * * I do not believe the precise difference between the respective work loads is to be measured and then applied with mathematical exactness to the new plan. This difference is simply one of the factors to be considered along with the others mentioned in Section 5, when we undertake to say whether a new incentive plan is equitable."

AWARD

Final decision is withheld pending a check time-study of the job to be undertaken under properly representative conditions at the earliest convenient opportunity. Such study shall be submitted to the Arbitrator and to the Union which shall notify the undersigned whether it desires to be heard further in the case with respect to the additional data presented.

EXHIBIT G

PAUL EDWARDS & ASSOCIATES

CONSULTANT'S REPORT TO ARBITRATORS
on
INLAND STEEL COMPANY - UNITED STEELWORKERS OF AMERICA
ARBITRATION OF GRIEVANCE NO. 22-F-36
(PAYLOADER OPERATOR)

Consultant's Comments on the Union Case

The Union says that the work load of the Payloader Operators has evidently increased more than the 26.9 percentage points of a full work load as found by the Company. Also, the employees have at no time approached the earnings expected from the new incentive plan. The Union states that it doubts that the anticipated assistance for the Payloader will be realized in practice.

The Union did not offer any substantive evidence of the amount of the increased work load.

Comments on the Company Case

The Company position is that the nature of the duties of the Payloader Operator have changed, with a net increase in work load of 26 percentage points (from 38.5 percent to 65.5 percent of a full day's work) accompanying the physical changes in the department.

The work loads indicated by the time studies made when 299-ton heats were being produced by four furnaces were projected by judgment and calculation to the work load for 320-ton heats and to the total work load per day for seven-furnace operation. The adjustments shown for the various classes of work are worth some attention.

Build Banks - The time allowed was increased 6 percent. A question of the correctness of this figure is justified by the fact that one of the means of increasing the furnace capacity from 299 tons to 320 tons was by banking the doors higher, at least for the old furnaces. It does not appear that the amount of material used to bank the doors is necessarily proportional to the increase in heat size. It is doubtful if the basis for a good projection of this work was available before the change. It is difficult to accept it at face value when the opportunity for a check under actual conditions is available.

Clean Up Floor Area - The allowed time was increased by 5 percent. This would seem to be a reasonable projection except for one point--it is possible that the amount of material used to

bank the doors is increased out of proportion to the increase in total amount of materials charged and used. If this is true, the clean-up time would not necessarily be 5 percent.

Restock Furnace Materials - The allowed time per heat was reduced by 14.5 percent. The Company position on this item was that the Payloader would get help from other jobs, such as the Highlift Operator, and that better handling facilities and more convenient placement of materials would reduce the amount of work to be done by the Payloader Operator per heat. It is difficult to accept this projection as adequate to the needs of the case from the figures supplied.

Maintenance of Vehicle - The constant would appear to fill the needs.

Miscellaneous - The constant time per heat would seem to fill the needs.

Consultant's Opinion

The relationship of earnings to ingot tonnage produced is shown on Chart XII for both incentive plans. The point marked "A" represents the base period earnings of $2.678 for 37,300 tons per pay period. The line marked "old" should give the earnings for any other tonnage produced. The point marked "B" represents the expected earnings from the new plan of $2.981 for 74,665 tons. It will be seen that the Company has adjusted the plan to pay more per ton, while the increased capacity is expected to increase the earnings from the greater tonnage. The small dots represent actual earnings from August 10, 1957, through the pay ending June 28, 1958.

In order to determine that the change in the amount of work per ton caused by the new conditions has not acted to upset the relations that appear on the tonnage chart, the same earnings were plotted on Chart XIII in relation to the work loads as calculated by the Company. Although the Company says that the Payloader work per ton of steel produced is reduced 10.6 percent, nevertheless the new plan pays a higher earning at the same work load, as well as for the same ingot production.

Except for the fact that the projections of work loads to the new conditions were subject to question, it may safely be said that earnings from the new incentive are equitable in relation to the previous incentive earnings and the previous job requirements.

Recommendation

Of the eight cases heard during the week of August 11, 1958, the method of projecting the work loads to the new conditions is most subject to question in this case. It must be remembered that the Company increased the new earnings to the level indicated by their "Standard Incentive Practice," a point higher than required by the terms of the Agreement. This appears to be an increase of 1.6 percent of the base rate at 39,300 tons per pay period. Nevertheless, it is our recommendation that a check time study of the Payloader Operators be made under the new conditions and that the results be submitted to the Arbitrator before final decision is rendered in this case.

Paul M. Edwards

Paul M. Edwards, Professional Engineer

October 14, 1958

CHART XII

PAYLOADER OPERATOR

INLAND STEEL - No. 3 OPEN HEARTH

GRIEVANCE 22-F-26

ACTUAL EARNINGS

- ○ 4 FCE OPERATION
- ● 5 FCE "
- ◐ 6 FCE "

3.00

2.90

2.80

2.70

2.60

2.50

2.40

BASE

A

B

NEW

OLD

37,300

74,665

10 20 30 40 50 60 70 80

THOUSANDS OF INGOT TONS PER PAY PERIOD

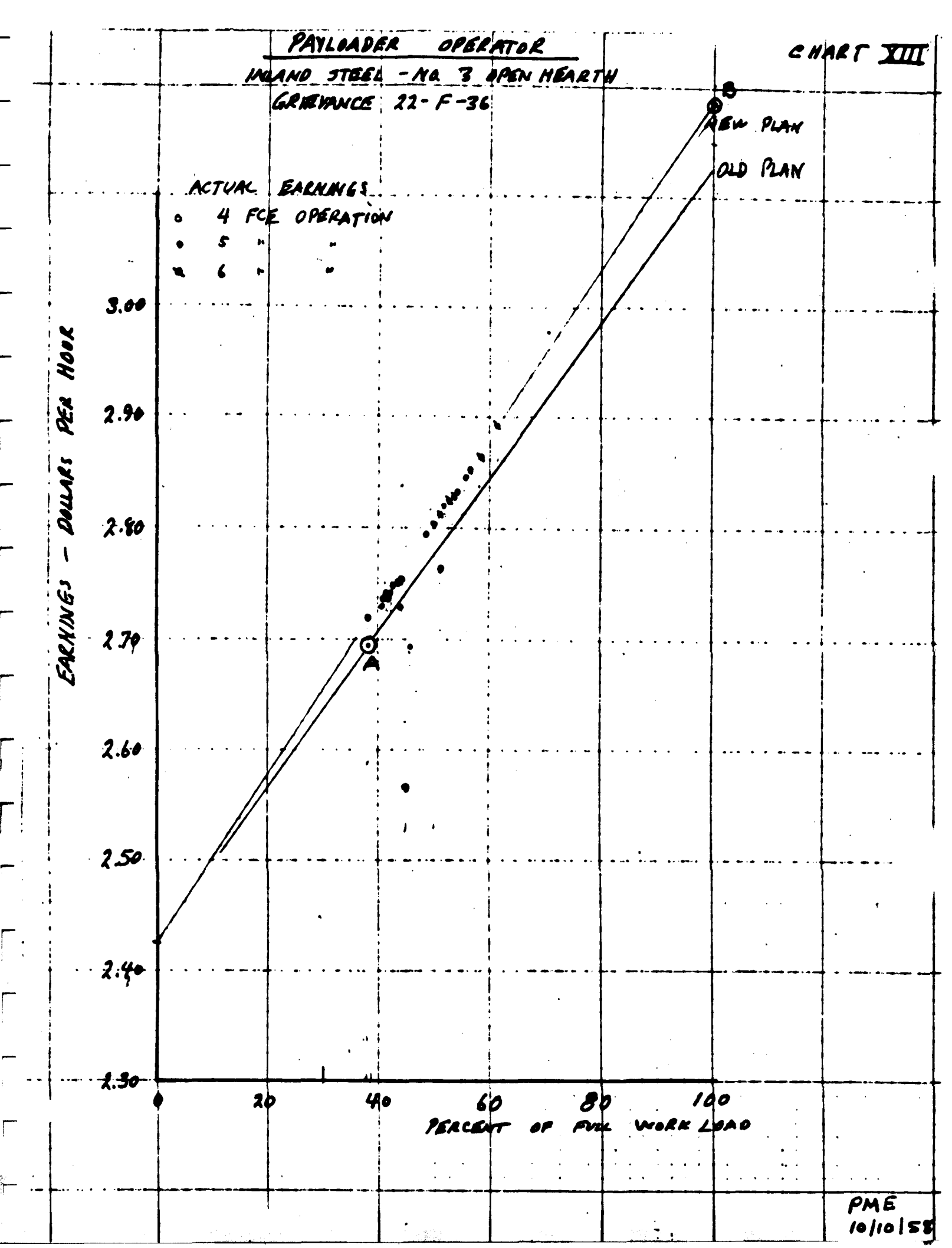
PMC 10/10/58

PAYLOADER OPERATOR

CHART XIII

INLAND STEEL - No. 3 OPEN HEARTH

GRIEVANCE 22-F-36



PME
10/10/58

H. Grievance No. 22-F-37

Docket No. IH 298-291

Arbitration No. 288

Maintenance Crews

The Consultant's report on the technical aspects of this case, together with a chart illustrating his comments is set forth below as Exhibit H.

The findings and recommendations in the Consultant's report are sound, consistent with the views expressed in the Permanent Arbitrator's prior awards in incentive cases and are hereby made a part of this award.

Under conditions of four furnace operation with 37,300 tons produced per pay period, 7.13 tons were produced per man-hour (5,236 man hours per pay period) and there was an incentive margin over base rate of 9.1 per cent. (Point A on Consultant's Chart VI). Under conditions of full seven furnace shop operation with an estimated 74,665 tons per pay period the production per man-hour is expected to go up to 11.43 tons(based on 6531 man hours per pay period) and the earnings margin to 11 per cent (Point B on Consultant's Chart VI). This I find to be equitable and in conformity with the standards in Article V, Section 5 of the Agreement.

The increase in tonnage per man hour (7.13 to 11.43) resulted principally from two physical facts: the increase in furnace heat size and the number of furnaces. The output increase due to the larger heat size (299 tons to 320 tons) was about 7 per cent. Had this occurred with no actual increase in work load of the maintenance crews, and with no revision of the plan, there would have been a small increase in the earnings of one half of one per cent which point would have been directly above "C" on the line marked "Old Plan" on the Consultant's chart. The tons of ingots per maintenance hour would have increased from 7.13 tons to 7.47 tons. Under the new plan and operation, however, this increase in tonnage would be compensated for at four furnace operation at about a 7.1 per cent margin over base rate instead of 9.1. This is not regarded as satisfying the standards of equitableness provided by the Agreement for the job requirements as nearly as they can be reproduced. The recommendation of the Consultant as to the basis for correcting this inequity in the new plan is regarded as sound and is adopted.

AWARD

The plan is remanded for adjustment in conformity with the recommendations of the Consultant which are incorporated herein and made a part hereof.

Peter Seitz,
Assistant Permanent Arbitrator

Approved:

David L. Cole,
Permanent Arbitrator

Dated: January 2, 1959

EXHIBIT H

PAUL EDWARDS & ASSOCIATES

CONSULTANT'S REPORT TO ARBITRATORS
on
INLAND STEEL COMPANY - UNITED STEELWORKERS OF AMERICA
ARBITRATION OF GRIEVANCE NO. 22-F-37
(MAINTENANCE CREWS)

Consultant's Comments on the Union Case

The Union's case stresses the fact that at no time from January 1, 1958, to May 31, 1958, did the earnings of the maintenance occupations in the No. 3 Open Hearth Department equal those enjoyed during the base period prior to the installation of the revised incentive plan. The amount of added equipment is cited as evidence of the need for larger crews. Certainly the Union's point that at the four-furnace level of operation with the crew size controlled by management the earnings are lower than previously should carry substantial weight.

Comments on the Company Case

The Company states that a projection of the amount of work necessary to maintain the equipment in the department was made from the actual experience in the four-furnace shop to the new seven-furnace condition. This is a matter of judgment, and it can only be said that the projections appear reasonable. There is no precise way to measure the increase in the amount of equipment, and the determination of the amount of maintenance required is even less precise. The basic Company position is that at seven-furnace operation there will be an increase in the work load of the Maintenance Crew and that the men will be equitably compensated by an increase in bonus earnings equivalent to .35 of the increase in work load. This position, of course, is based on the Company's "Standard Incentive Practice" wherein 35 percent bonus above the base hourly rate would be paid for 100 percent incentive work load.

The Company position has much to recommend it, being based on a set of principles. The principles, however, are not a part of the Agreement between the parties. The question then is whether the application in this case meets the criteria of the Agreement. The criteria in question are previous job requirements and previous incentive earnings.

Consultant's Opinion

The problem may be put in graphic form, as shown on Chart VI. On this chart the previous earnings, in percent of base hourly rate, are shown as Point "A," related to the previous job requirements of 7.13 tons of ingots per maintenance man hour. This represents the former four-furnace level of operations. Two changes have taken place in the operation of the department. First, the size of the heat has been increased from 299 to 320 tons, and the firing

rate has been increased from 800 to 1000 gallons per furnace hour. Second, the number of furnaces was increased from four to seven, with attendant increases in equipment to be maintained.

Now, if the first change had caused no increase in maintenance work per furnace hour, there would have been a 7 percent increase in tonnage for which the same earnings would have been equitable. That is, no more work; the same pay. The idea of no increase in work cannot be accepted at face value. There obviously would have been some increase, but not in direct proportion to the increase in tonnage. If the idea had been accepted, the incentive plan should then have been revised to pass through the point marked "C" on the chart. The new plan, at the new four-furnace operation, would still have produced appreciably lower earnings than this revision.

The new incentive plan is based on the Point "B" representing the new level of earnings justified by the "Standard Incentive Practice" at the expected tons per man hour at seven-furnace operation. The factors that entered into the determination of this point are evaluated as follows:

Tonnage - 74,665 tons per pay period, still to be attained.

Man hours - 6,513 to maintain the equipment. To be demonstrated, although the projection to this figure appears reasonable.

Work load increase from 29.8 to 32.1 percent of full incentive work load. This increase in work load appears reasonable, considering the projected increase in total work together with the increased man hours.

Earnings - 11 percent above base rate. This is equitable in relation to the previous requirements of tons per man hour and the previous earnings of 9.1 percent.

The expected level of earnings may be accepted as equitable if all of the other conditions work out as planned.

The plan does not meet the criteria at the previous job requirements. The Company has apparently taken the position that the opportunity to earn 2 percent more at seven-furnace operation compensates for a reduction of about 2 percent when the old conditions of four-furnace operation occur. A tabulation of the significant figures follows:

	Old Plan	New Plan	
a. Four-furnace Operation			
Tonnage per pay period	37,300	40,000	
Man hours	5,236	5,236	(est.)
Tons per man hour	7.13	7.65	
Earnings - incentive margin	9.1%	7.2%	
b. Seven Furnaces			
Tonnage per pay period		74,665	
Man hours		6,513	
Tons per man hour		11.43	
Earnings - incentive margin		11.0%	

Recommendation

The incentive plan for the Maintenance Crew should be revised to return earnings of 9.1 percent above base hourly rates at an ouput of about 38,700 ingot tons per pay period. This figure divides the effect of the increased heat size by half. The 11 percent earnings with the proposed tonnage and crew hours at seven-furnace operation is considered equitable.

Paul M. Edwards

Paul M. Edwards, Professional Engineer

October 14, 1958