Arbitration Award No. 755 IN THE MATTER OF ARBITRATION Between INLAND STEEL COMPANY Indiana Harbor Works and UNITED STEELWORKERS OF AMERICA Local Union No. 1010 Grievance No. 28-R-1 Arbitrator: Clare B. McDermott Opinion and Award November 26, 1985 Subject: Placement of New Job In Or Out of Bargaining Unit--Combination of Technical, Supervisory, And Production And Maintenance Duties. Statement of The Grievance: "The Company is violating the Collective Bargaining Agreement by manning the Continuous Anneal Line with a salaried operator rather than bargaining unit employees. "Relief Sought: The Company post for the position in question in the same manner as outlined in the Continuous Anneal Line manning agreement for production personnel, and pay any monies lost. "Violation is Claimed of Article 2, Section 2, Article 5, Section 1, and Article 13, Sections 1 and 21." Agreement Provisions Involved: Article 5, Section 1 of the March 1, 1983 Agreement. Statement of the Award: The grievance is sustained as stated in the last paragraph of the accompanying Opinion. CHRONOLOGY Filed: April 8, 1983 Step 3 Hearing: August 17, 1983 Step 3 Minutes: March 21, 1984 Step 4 Appeal: March 30, 1984 Step 4 Hearing: August 23, 1984 Step 4 Minutes: December 21, 1984 Appeal to Arbitration: January 2, 1985 Arbitration Hearing: January 15, 16, and 17, 1985 Plant Visit, Inland: February 25, 1985 Plant Visit, Bethlehem: February 26, 1985 Appearances January 15, 1985 Company H. M. Thullen -- Legal Counsel, Vedder, Price, Kaufman & Kammholz A. B. Smith, Jr. -- Legal Counsel, Vedder, Price, Kaufman & Kammholz W. P. Boehler -- Superintendent, Labor Relations F. Cassell -- Professor, Industrial Relations, Northwestern University R. B. Castle -- Arbitration Coordinator, Labor Relations R. V. Cayia -- Coordinator, Labor Relations L. Corpus -- Compensation Analyst J. B. Cundiff -- General Foreman, No. 3 CAL K. M. Gaskey -- Senior Research Engineer T. L. Kinach -- Assistant Superintendent, Labor Relations M. B. Lapman -- Process Automation Engineer/Foreman J. A. Nielsen -- Coordinator, Labor Relations A. J. Scolnik -- Superintendent, Compensation & Administration Z. C. Siurek -- Foreman-Engineer, No. 3 CAL. T. L. Urban -- Senior Staff Engineer, Process Automation Union Philip Scheiding -- Arbitration Department Joseph Gyurko -- Chairman, Grievance Committee Rudy Schneider -- Grievance Committee Don Lutes -- Secretary, Grievance Committee

Lonnie Cotner -- Witness Joseph Kovacs -- Witness Jay Lockridge -- Witness Floyd Kinsey -- Observer Albert Vanes -- Observer Art Esslinger -- Observer Al Moseley -- Observer William Andrews -- President Thomas Barrett -- Staff Representative William Scully -- Staff Paul Cherven -- Witness Theodore Rogus -- Observer John Kovalcin -- Staff John Kopel -- Staff January 16, 1985 Company H. M. Thullen A. B. Smith, Jr. R. V. Cayia J. B. Cundiff L. Corpus K. Gaskey T. L. Kinach M. B. Lapman J. Nielsen A. J. Scolnik Z. C. Siurek T. L. Urban Union P. Scheiding J. Gyurko R. Schneider D. Lutes L. Corner J. Kovacs J. Lockridge F. Kinsey A. Esslinger A. Moseley B. Andrews T. Barrett W. Scully T. Rogus J. Kovalcin J. Kopel January 17, 1985 Company H. M. Thullen A. B. Smith, Jr. J. B. Cundiff L. Corpus K. M. Gaskey M. B. Lapman J. A. Nielsen Z. C. Siurek T. L. Urban

R. Vela Union P. Scheiding J. Gyurko R. Schneider D. Lutes L. Cotner J. Kovacs J. Lockridge F. Kinsey A. Esslinger A. Moseley W. Scully J. Kovalcin BACKGROUND

This grievance from the new No. 3 Continuous Annealing Line of the No. 3 Cold Strip East Department of Indiana Harbor Works claims that Management's assigning outside the bargaining unit the work of the new responsibility for operation of the line was in violation of Articles 2, Section 2, 5, Section 1, and 13, Sections 1 and 21 of the March 1, 1983 Agreement.

Following studies in the late 1970s, the Company began engineering work in March of 1980 on what it calls a state-of-the-art continuous annealing line, specially designed for production of what it says would be a new generation of high-strength, low-alloy steels for the appliance and automotive industries. Construction began in June of 1981.

The studies persuaded the Company to take a license for use of Nippon Kokan KK's (NKK) continuous annealing process, which uses water-quench cooling technology. Apparently the Company had licensed NKK to use Inland's water-quench process in the 1960s. The Company explains that the advantages of the NKK process include the facts that light-weight, high-strength steels can be produced without addition of large volumes of alloys; a wide range of products can be made; superiority in strip mechanical properties can be achieved; products have good weldability and superior ductility; upstream rolling-mill power requirements are reduced; continuous-cast steels can be utilized; processing times are relatively low at approximately fifteen minutes; and Inland's proprietary MartINsite (ultra high strength) products can be made. The line is said to be capable of producing a high degree of uniformity in mechanical properties and surface quality from head to tail within a coil and also from coil to coil. It is intended to yield 400,000 tons of finished product a year, with tensile strengths up to 220,000 pounds per square inch.

The line has nine major components. They are the entry end, strip cleaning, entry looping tower, annealing furnace, water quench, strip pickling, aging furnace, delivery looping tower, and delivery end.

The heat-treating units require further explanation. They include the annealing furnace, water quench, and aging furnace. The annealing furnace has a preheat, heat, soak, and gas-jet cool section. After the waterquench and strip-pickling processes, comes the aging furnace, which has a reheat, overage, and fast-cool section. The heat section of the annealing furnace has ten zones.

This line is apparently one of only two such operations in this country. The other being a continuous heattreating line at Bethlehem's Burns Harbor Works.

The above, relatively brief description of the line discloses only the bare bones of an immensely complicated and sophisticated continuous-annealing operation, with perhaps the most modern processes, devices, and technologies that exist. If that were the only unusual characteristic of the line, however, the present problem might not have arisen.

As modern as is all the line equipment, the systems used to control and monitor all electrical and mechanical equipment are even more so. It has three major systems: automation, instrumentation, and process control.

The automation system (line control) monitors and controls all electrical and mechanical equipment. It is driven by three Westinghouse computers. It has two programmable controllers, a network of remote, data-acquisition equipment, what are called man-machine interfaces (cathode ray tube display screens), and a "wide-band data highway" that ties the whole system together. Under this system it is said that processing of coils is performed in a totally automatic mode (way), so that coils move through the line with little or no intervention on the part of the operator, who merely monitors the sequence of events.

The instrumentation system uses a Fisher-Provox computer to control the heating and cooling operations. Many microprocessors control each furnace zone. This system responds to three kinds of controls, that is, local-setpoint control, the operator sets operating conditions of heating and cooling. In process-setpoint, an exit-strip temperature controller sets the operating conditions for one or more zones of the furnace. In computer control, the process-control computer sets all operating conditions of the heating and cooling operations.

The process control uses a Digital Equipment Company computer system, central to the line processing. It consists of two "large mini" computers, the front end and the host. The front-end computer communicates with the instrumentation, automation, the operator, Central Data Processing, and the host computer. That arrangement frees the host computer to handle production control, line control, operator interface, quality assurance, and automatic strip-temperature control.

The production-control system is to maintain production schedules, track coils through the line, cut coils to shipping size, and report production results to Central Data Processing.

The line-control system supports operation of the automation system, in that pre-setting of operating data, such as tension and speed, collecting of data, such as length of cut coil and weight of produced coil, and tracking of the weld through the line are done by this system.

The operator-interface system is the group of cathode ray display tubes that the operator uses to communicate with the process-control computer. It enables the operator to learn what is happening in the processes and to change line-ups, report production, and monitor operation of the automatic striptemperature control system.

The quality assurance system is to give Metallurgists a detailed analysis of coils produced. It examines many strip temperature samples, correlates them with positions along the strip length, and compares those correlations to the aim strip-temperature tolerances set for that product. An automated-disposition algorithm (strategy) is used to determine whether the coil (head to tail) meets the stringent quality standards established for these products.

The automatic strip-temperature control system allegedly is the heart of the heat-treating process. It automatically controls all furnaces and line speeds on a continual basis to assure proper heating, and it precisely controls relevant conditions during transitions between coils to insure that each is within metallurgical aims.

When the line is operating under computer control, the automatic strip-temperature control system determines the operating conditions needed to achieve the aim exit-strip temperature and automatically adjusts those conditions, if necessary, to eliminate the difference between aim and actual strip temperatures. The automatic strip-temperature control system contains setup models, adaptive update models, transition strategy, and control algorithms (strategies or recipes for a course of computer action). Setup models are heat-transfer equations that determine the steady-state operating conditions needed to achieve aim exit-strip temperature for each product. Adaptive update heat-transfer models use process measurements to establish update coefficients that correct the setup-model calculations to take account of changes in furnace performance and strip-surface conditions. The transition strategy contains the logic and models that determine timing and adjustments to line speed and furnace-operating conditions required to minimize strip-temperature variations during size and cycle changes. The control models were developed by modern control theories and establish adjustments to operating conditions that are needed to correct for process variations, in order to keep tight control of strip temperature.

Prior to the initial threading of strip, the line drives had been tested individually and speed-matched without load. The line was threaded with strip on May 16, 1983. Cold-run tests began on May 19 and were run to fine tune the automated sequence of equipment and to train operating crews, and they continued through July 18. Testing was done at first on the day turns but was explained later to all turns during the last three weeks.

Hot-run testing began on July 19, and it involved fine tuning the combustion system, combustion-control system, and crew training. The first commercial production was run on August 31, and the line was commissioned on September 1, 1983. Manufacture of salable product did not begin until December 4, 1984.

The line has processed commercial products, which consisted of commercial-quality cold-roll and cold-roll motor-lamination grades on night turns and weekends. During much of the period since commissioning, the day turn was used to implement and tune furnace-control models and to determine strip-thermal cycles and steel chemistries required.

There are four different ways to operate the line, and they have been called "modes". They are computer control, process setpoint, automatic, and manual, or a combination of those four.

Computer control is the most sophisticated form of operation. Under it all temperature and pressure settings of the various instruments connected to furnace combustion and cooling systems are regulated by the frontend and host computers. The operator synchronizes those two systems, so that the computer network anticipates thermal demands and compensates by heating or cooling all ten furnace sections. Computercontrol operation is a feed-forward system, allowing furnace-zone temperatures, wind temperatures, and pressures needed for meeting aim temperature at the exit of each section to be predicted by a computer model. The operator must monitor performance of the two separate computer systems to insure that while heat-treating is going on the product being made actually corresponds to ordered specifications. If the computer model being used does not yield the appropriate metallurgical qualities, the operator must discern that, determine where the failure lies, ant override the computer model to adjust to correct error. He must evaluate operating conditions and change mathematical coefficients (higher level of college algebra) of tunable variables in computer models as required in his judgment to modify furnace conditions. Operation of the line in the computer-control form is the goal, but it has presented substantial operating problems of debugging and shakedown. It was not attained until December 4, 1984.

The process-setpoint form of control is a feedback system, under which furnace-zone temperatures (7 through 10) are controlled by the operator in light of his knowledge of aim exit-strip temperature required to make the product quality desired. He sets a strip-temperature setpoint which the strip must have as it leaves each furnace section and makes adjustments to correct deviations between aim and measured temperature.

The automatic form of control (somewhat of a misnomer) puts the operator in sole control of exit-strip temperatures, which he regulates by altering furnace-zone setpoints, wind temperatures, and pressures to correct for line-speed variations. This is neither a feed-forward nor a feed-back system, but is an open-loop system, where zone and wind temperatures and wind pressures are adjusted continually.

Manual control has no feedback or setpoints for furnace-zone temperature control. It is meant for use primarily in light-up and rapid cool-down stages of operation.

The operator may use any one of the four forms of control or a combination of them for different line sections, depending upon conditions and his analysis of the strip's conformity with ordered specifications. During the early months of 1983, the Company proposed to the Union a plan for manning the three bargaining unit jobs it thought necessary to operation of the line. These were the Job Class 13 Entry End Operator, the Job Class 15 Delivery End Operator, and a Job Class 11 Utilityman. There were discussions with the Union, and ultimately an agreement was reached as to this situation on March 14, 1983. During those discussions the Company told the Union that it intended to establish a fourth responsibility associated with operation of the line and that it was to be salaried position, excluded from the bargaining unit. This grievance followed on April 8, 1983, before the Company actually had established the salaried position.

Shortly after the grievance was filed, however, Management did create and establish a non-exempt, salaried position of Operating Technician. The Company's reasons for putting the job outside the bargaining unit were that its duties were very technical, required advanced knowledge of mathematical and computer operations and that it therefore called for an excluded "technical employee" within the language of paragraph 5.1 of Article 5, Section 1 of the Agreement.

Apparently between the spring of 1983 and August of that year, the Company decided that a range of obviously "supervisory" duties should be added to the earlier description of the Operating Technician. They were added on August 1, 1983, the title of the job was changed to Foreman-Engineer, and it was elevated from non-exempt salaried to the status of exempt, salaried, where it now stands. Although it is long and detailed, the description of the Foreman-Engineer is helpful to understanding and resolution of this problem. It reads in relevant part as follows:

"I. POSITION PURPOSE

Supervise the operation of the computerized control systems for the continuous annealing line in order to produce high strength steels in accordance with customer requirements.

"II. JOB DIMENSIONS

Personnel Supervised: 3 Bargaining Unit employees

"III. NATURE AND SCOPE

The Foreman Engineer reports to the General Foreman--No. 3 CAL as well as to the Turn Foreman--No. 3 CAL. Reporting to the Foreman Engineer is the operating crew which consists of the Utilityman, the Entry

Operator, and the Delivery Operator. The Foreman Engineer also directs Mechanical, Electrical, and Process Automation personnel in maintaining the line when necessary.

No. 3 Continuous Anneal Line processes a cold-rolled steel strip through a sequence of heat treating operations called thermal cycles to produce certain metallurgical properties in the steel. Variations in the thermal cycle are used to produce a wide range of strip products. Through careful analysis and control of the various computer systems the Foreman Engineer ensures that the specific aim thermal cycles are achieved and maintained; thereby, guaranteeing the micro-structure and mechanical properties of the finished strip product. The synchronized computer systems control strip tension and line speed; combustion air and gas flow; furnace zone and quench tank temperatures; wind temperatures, pressures, and fan speeds; cooling water temperatures and flows; etc. Many non-routine and experimental products are processed on this unit.

The Foreman Engineer performs the following functions to achieve his objectives:

-- Supervises, on a turn, the operation of the continuous anneal line to produce a quality product.

-- Supervises, on a turn, the operation of the furnace combustion and zone heating computer control systems to maintain furnace temperature set points such that strip temperature during heating meets specifications.

-- Supervises, on a turn, the operation of the furnace cooling computer control systems that reduce strip temperature as required by specifications.

-- Monitors mechanical properties of the finished strip product on a coil by coil basis using information provided by Metallurgical personnel. Modifies math thermal models and configures operating system to compensate for computer system failure to meet or optimize thermal cycle specifications.

-- Administers and enforces company rules and standards for safety and personal conduct; takes appropriate disciplinary action in light of violations of said rules and standards.

-- Trains subordinates and new employees in order to maintain efficient crews to provide qualified replacements for advancement and temporary vacancies.

-- Represents the Company in handling oral grievances.

-- Determines the need for temporary replacements and the means by which temporary vacancies on a turn are to be filled, including the authorization of overtime.

-- Performs required inspections of the unit to ensure good operating order.

-- Coordinates with assigned mechanical, electrical, and process automation personnel on equipment repairs and activities associated with the preventative maintenance program, as well as with emergency repairs.

-- Prepares turn report to inform others of necessary repairs or of problems incurred on the turn. Sees that necessary production and quality related records are prepared and maintained.

-- Supervises, on a turn, the protective gas system.

-- Is responsible for safe and efficient shutdown of the furnace as required.

The Foreman Engineer also meets his objectives through supervising the activities of subordinates. performing the following functions:

-- Arranging coils according to the line-ups.

- -- Welding coils together.
- -- Feeding strip into the line.
- -- Inspecting, shearing and coiling the strip.
- -- Banding and marking coils.

-- Threading or removing broken strips through the line.

-- Operating crane and/or trackmobile to move and transport coils.

The major challenge of the Foreman Engineer is to meet metallurgical requirements of a variety of products by modifying or overriding the math thermal control models of the furnace heating, cooling, and combustion systems and to configure the computer process control system in the most efficient and accurate manner to produce products with extremely low metallurgical variability. The Foreman Engineer is also challenged to coordinate the various computer systems and diagnose system malfunctions. The Foreman Engineer decides which degraded mode of control should be used when the computer control models cannot meet product requirements. The Foreman Engineer typically makes decision regarding rejecting processed material and stopping production for emergency repairs. The Foreman Engineer also exercises independent judgement when disciplining employees, handling oral grievances and in staffing on the turn.

Within the Company, the Foreman Engineer has daily contact with Research personnel regarding the establishment of control standards, with Metallurgical personnel regarding quality standards and with Power and Fuels personnel regarding the operation and control of the combustion system. This individual also has contact with Process Control personnel regarding computer control format development. Outside the Company, the Foreman Engineer has contact with vendors and contractors regarding various equipment problems or service needs.

The position incumbent must have a basic understanding of computer systems, a working knowledge of annealing practices and an understanding of flat products processing and quality concepts. The incumbent should possess a working understanding of the Accident Preventative Fundamentals program, the Collective Bargaining Agreement and the Statistical Process Control Program. This position requires an individual with good communications, inter-personal and leadership skills to supervise bargaining unit employees and enlist the cooperation of others.

"IV. PRINCIPAL ACCOUNTABILITIES

The Foreman Engineer oversees the processing of coils and ensures that the work is done safely and efficiently. The quality of the material produced is critical to the ultimate use of the product." Section 1 of Article 5 of the Agreement reads as follows:

"ARTICLE 5

"Union Recognition and Union Membership

5.1 "Section 1. The Company recognizes the Union as the exclusive representative for the purpose of collective bargaining in respect to rates of pay, wages, hours of employment and other conditions of employment of the hourly paid production, transportation, construction and maintenance employees on the payroll of the Company at its Indiana Harbor Works, excluding superintendents, assistant superintendents, foremen, assistant foremen, office employees, salaried employees, technical engineers, technical employees, draftsmen, chemists, bricklayers, timekeepers, watchmen and nurses.

5.2 "The occupations included within the above described bargaining unit as shown by the list thereof furnished to the Union on November 13, 1951, as revised to the date hereof, shall continue in force for the duration of this Agreement. Such listing shall be revised from time to time hereafter as occupations which are within said unit are added to or removed from the list by reason of the establishment of new occupations or the changing or discontinuance of existing occupations, and the Union shall be advised promptly of such revisions. Should any dispute arise as to whether a new or changed occupation is within or excluded from the bargaining unit above described, such dispute may be taken up under the grievance procedure set forth in Article 6 hereof, beginning with Step 3.

5.3 "When Management establishes a new or changed job in the plant so that duties involving a significant amount of production or maintenance work, or both, which is performed on a job within the bargaining unit (or, in the case of new work, would be performed on such a job) are combined with duties not normally performed on a job within the bargaining unit, the resulting job in the plant shall be considered as within the bargaining unit. This provision shall not be construed as enlarging or diminishing whatever rights exist in respect of withdrawal of nonbargaining unit duties from a job in the bargaining unit, provided that where nonbargaining unit duties are placed in a job in the bargaining unit under this provision, such duties may be withdrawn at any time. Management shall, on request, furnish to the Union reasonable information to permit determination of questions of compliance with this provision."

The Union begins by agreeing that this job may be more complex than other jobs in the bargaining unit. It insists, nevertheless, that it could be and should be classified under the Manual as a bargaining unit job. It says the duties seem to be akin to those of, for example, the 80" Tandem Mill Operator in No. 3 Cold Strip East. The Union argues that increased complexity or responsibility of a job does not automatically move a set of duties out of the bargaining unit, citing Alan Wood, Bethlehem, and U.S. Steel arbitration decisions. The Union contends that complexity of a job's duties is determinative of what job class it should have in the bargaining unit, but is not relevant to whether or not it should be in or out of the unit.

The Union relies also upon Bethlehem's placement in its Burns Harbor Works bargaining unit of the duties of Line Operator, the top job of four employed in operating Bethlehem's allegedly similar continuous annealing line, also licensed from NKK.

The Company's Process Control Engineer, who determined what computer controls would be necessary to operate this line as it was designed, said the Foreman Engineer must continually interact with the system, since control of the furnaces was a joint endeavor between man and machine, that is, a combination of the computers' computational power and the Foreman Engineer's judgment and decision-making abilities.

Responding to the Union's reliance on the Bethlehem job's having been put in the bargaining unit there, the Process Control Engineer said the two operations were not similar, even though many parts of both were designed and furnished by the same manufacturers. He said the management and process-control philosophies of each company were extremely different, in that Inland's computer system was roughly four times larger than Bethlehem's, and that Bethlehem's was not intended to be used in the same manner or for the same purpose as was Inland's. Bethlehem has only ten annealing practices, while Inland envisions manufacturing 75 distinct products, with 25 possible variations on each, for over 1800 separate annealing practices. The Engineer said Bethlehem's job would compare with Inland's 80" Tandem Mill Operator in that each feeds pre-programmed instructions into less complex computer-command systems, with virtually no human intervention in the process. The Engineer said also that Bethlehem's system relies on inspection after production to see whether customer specifications have been met, whereas Inland's more detailed and variable controls were meant to enable the Foreman Engineer to diagnose and compensate for deviations while production was going on in order to ensure that specifications are met. Those demands on the Foreman Engineer allegedly exceed the requirements of any position throughout the entire Steel Industry. The Company argues, in any event, that, whatever Bethlehem might have done with a job, is not relevant to this problem at Inland under a different collective bargaining agreement.

The Company's Senior Compensation Analyst witness said there were fourteen or fifteen other positions within the plant, excluded from the bargaining unit, which were similar to this one in the very technical nature of the learning required in order to control operation of complicated processes by computer, or because they were supervisory, or both.

The Union noted that seven or eight of them had been established before advent of paragraph 5.3 (Scope provision) of Section 1 of Article 5 and that some had been excluded by agreement.

The Company's Supervisor of Administration and Compensation said that none of the duties of the Foreman Engineer properly belong in the bargaining unit, since they are supervisory and technical and, therefore, excluded under paragraph 5.1 of the Agreement. He said, moreover, that the job does no significant amount of production and maintenance work.

The Company says that heat-treating practices for this annealing line were developed by its Research Department for exclusive Company use and are the private and confidential property of the Company. The Foreman Engineer must know and use them and, therefore, his knowledge of those proprietary practices, which are protected also against disclosure in the licensing agreement with NKK, require that the job not be in the bargaining unit.

Management says the Foreman Engineer also makes final judgments on whether or not to ship production off the line and that such decisions historically have been considered to be management prerogatives. The Company relies also on the supervisory duties in the job's description. They are necessary, it is said, to ensure that the bargaining unit employees on the line respond to the Foreman Engineer's directions without demurral. A Republic decision and several NLRB decisions are cited in that regard.

The Company next said that a comparison of the duties of the Foreman Engineer with a listing of tests set out in the Code of Federal Regulations under the Fair Labor Standards Act shows that incumbents are excluded from its demands, and that such exclusion justifies, indeed, demands exclusion of the job from the bargaining unit, citing an Armco decision. The tests for exemption under the Act were stated by the Company as follows:

"1. Position is paid \$155 or more a week;

"2. Position manages an enterprise or department or subdivision thereof;

"3. Position customarily and regularly directs the work of 2 or more other employees;

"4. Position can suggest changes in status of other employees;

"5. Position customarily exercises directionary power;

"6. Position performs nonexempt work not more than 20% of weekly hours worked.

"7. If the position is paid \$250 or more a week, the position is exempt from the Fair Labor Standards Act if only tests 2 and 3 above are met."

As to Article 13, the Company argues that its seniority rights arise for those who are employees within the bargaining unit and have nothing to do with questions such as this as to whether or not a job should be in the bargaining unit in the first place.

The Union noted also that Management began scheduling persons to train on and operate the line in April of 1983, with the job still called "Operating Technician" and with no "supervisory" duties in its description. In August the Company added supervisory duties to the description and changed the title to "Foreman Engineer." The Union says both changes were paper ones only and were transparent ruses. It noted that a

regular Turn Foreman is assigned to this operation and has responsibility for the crew. Moreover, says the Union, it is admitted that the Foreman Engineer has exercised only a few of the "supervisory" duties. The Company stresses the technical duties of the job, noting that paragraph 5.1 of Article 5, Section 1, excludes "technical employees" from its description of jobs making up the bargaining unit.

In this regard, the Company relies on standards it says it formulated in 1950 to determine eligibility for inclusion in the bargaining unit under Article 5. They are titled Standards for Determination of Eligibility or Ineligibility for Membership in United Steelworkers of America. Pertinent parts of those 1950 standards are as follows:

"TECHNICAL DETERMINATIONS

"Factors to be considered

"1. Is the job directly and immediately related to production or maintenance?

"2. Do the occupational duties entail work of a nature which tends to reveal the thinking or planning of managerial personnel, which, if revealed, could affect the company's public, competitive, or bargaining position?

"3. Do the occupational duties entail the regular use of advanced skills of a degree that can generally only be acquired through special preparation or college training in one or more of the fields of physics, metallurgy, chemistry, engineering, or medicine.

"Guides for application of factors

"1. If Factor Number 1 is not present, the occupation is excluded from the Bargaining Unit.

"2. If Factor Number 1 is present, the occupation is included unless Factors 2 or 3 are present.

"3. The presence of Factors 2 or 3 will exclude the occupation from the Bargaining Unit.

"4. If none of the factors are present, the occupation is included."

The Company argues that both Factors 2 and 3 are present in the technical duties of the Foreman Engineer description and, therefore, justify its exclusion from the bargaining unit. Management claims these standards were used by the parties in establishing a November 13, 1951 list of included and excluded jobs that they then were considering. Paragraph 5.2 of the Agreement refers to the November 13, 1951 list of jobs. The Company notes also that, in contrast to many other companies in the Basic Steel Industry, Inland has no bargaining unit of office, clerical, and technical employees.

Management contends also that the technical duties of the job would cause it to be excluded from a bargaining unit under decisions of the NLRB, citing Board decisions. It claims, as well, that the Board would exclude this job as a "managerial" one, even if not a "supervisory" job, citing United States Supreme Court and NLRB decisions.

The Company refers to the 1950 standards also for purposes of justifying exclusion of the job on the basis of the supervisory duties added to its description in August of 1983. The 1950 Standards relating to "supervisory" duties read as follows:

"SUPERVISORY DETERMINATIONS

"Factors to be considered:

"1. Have authority to perform or make effective recommendations relative to the following:

A. Hire

B. Fire

C. Discipline

D. Change in employment status

E. Adjustment of grievance

"2. Direction of working force:

A. Make decisions and direct action of subordinates for Maintenance of quality, equipment, and production standards.

B. Observe, check, and report or make recommendations relating to the effectiveness, efficiency, or accuracy of other employees.

C. Placement on/or delegation of employees to tasks without consultation from supervisors.

"3. Scheduling work which plans and projects more than just on-the-job working procedure.

"4. Performing work customarily or traditionally performed by members of bargaining unit.

"Guides for application of factors:

"1. When at least two of factors 2A, 2B, and 2C are present, or combinations thereof, and none of the other listed factors are performed, the occupation will be excluded from the bargaining unit.

"2. When Factor 2C alone is present or in conjunction with Factor 4, the occupation will be included in the bargaining unit.

"3. When at least two of Factors 2A, 2B, and 2C are present, or combination thereof, and any other factor enumerated under 1 or factor 3 is present, the occupation will be excluded from the bargaining unit, regardless of the presence of Factor 4, but in such cases steps will be taken to avoid the conflict between supervisory duties and provisions of the Collective Bargaining Agreement relative to work for supervisors. Such cases can be resolved by assigning supervisory duties to the next level above, or by removing bargaining unit worker duties from the occupation in question."

The Company insists the supervisory duties quoted above in the Foreman Engineer's description conclusively demonstrate that it must be excluded from the bargaining unit. Management cites NLRB decisions for the proposition that it is sufficient for this purpose if the job possesses supervisory authority, no matter whether or not it ever has exercised it.

The Company says also that the Foreman Engineer acts as a technical consultant with other departments, such as Process Automation, Power and Fuels, and Research, as to recommendations for changes in line operations. Moreover, it is said the position acts also as a troubleshooter.

The Company stresses its careful and detailed work in considering and finally selecting four persons now assigned as Foreman Engineers. It says they were required to have the ability to absorb the very specialized training on heat-treating techniques, allegedly not found anywhere else in the American Steel Industry. Candidates were required to have significant work experience or education in general electrical, mechanical, and computer technology. Each of the four persons chosen (One came from the bargaining unit.) had earned at least one academic degree, and Management saw that as evidence of the person's ability to absorb the required training. After selection, each candidate began further technical training by the Process Control Engineering responsibility, aided by the Research Engineering staff. Training included both classroom and on-the-job instruction.

The Union believes that the Company picture of extremely technical duties is somewhat overdone, and it contends that addition of the "supervisory" duties was a desperate afterthought and should not be taken seriously here.

Even so, however, the Union insists that it still is safe in taking refuge in paragraph 5.3 of Article 5. It insists that, even agreeing for purposes of discussion here that the Foreman Engineer involves some very technical duties and some real supervisory duties, the resulting job nevertheless must be in the bargaining unit because it performs also a significant amount of production and maintenance work. In the face of such a combination of bargaining unit and nonbargaining unit work, the Union contends the Company has no alternative to placing the job in the bargaining unit. The Union says that a reading of the Company's own listing of the job's duties convinces that a significant amount of production and maintenance work is involved in the Foreman Engineer's duties. If that be true, the Union contends that paragraph 5.3 demands that the job be in the unit.

The Union explains that in the early 1960s the parties were trying to deal with Union dissatisfaction with the situation that resulted then when Management would combine bargaining unit and nonbargaining unit work in one occupation. The job then generally wound up outside the unit, because of inclusion of nonbargaining unit work. With adoption of the forerunner of paragraph 5.3, which the Union calls the "Scope" provision, in the Experimental Agreement in 1963, the opposite result would occur. That is, thereafter when new or changed jobs included supervisory or technical duties and a significant amount of production and maintenance work, the entire job had to be within the bargaining unit, but the Company also then gained authority to remove the nonbargaining work from the job.

The Union says the Bethlehem operation and job are similar to these, in that both allegedly can be operated in four ways: manual, automatic, process setpoint, and computer control. At both facilities the crew works as a team in dealing with strip breaks, and this Foreman Engineer works in helping to mend strip, requiring a significant amount of physical exertion. The four software routines are said to be similar also, in that both have a set up routine, an update routine, transition strategy, and individual control systems. Finally, it is said that both operations have ten zones through which the strip is processed to achieve desired properties. The Union says that all "Line Operator" jobs on production units at No. 3 Cold Strip Department are bargaining unit positions. It insists bargaining unit employees are capable, if properly trained, to handle all kinds of complicated and technically difficult work. It notes that many already do.

The Company cited fourteen examples of positions at the plant, including some "operator" type occupations, that are excluded from the bargaining unit. In any event, Management notes the No. 3 Continuous Annealing Line is a new operation, and it says, therefore, that it can have no local working conditions.

The Company contends that the Union's application of paragraph 5.3 is simplistic and erroneous, in that the argument says if a job produces something or maintains something, it must be in the bargaining unit. The Company agrees that what the Foreman Engineer does eventually results in production, but it says that is true also of every person in the line of authority, from the superintendent, to the general foreman, to the technicians, and others involved in running the plant.

The Union argues that the Company's contentions from the Fair Labor Standards Act and from NLRB decisions are irrelevant here. This is said to be a question of inclusion of a job in the unit and not of certification of an appropriate unit. The Union says it is entirely proper under the Labor Management Relations Act for parties to a collective bargaining agreement to agree upon what will be the proper resting place of jobs that have both nonbargaining unit and a significant amount of bargaining unit duties in them. The Company replies that the Fair Labor Standards Act and NLRB decisions are relevant, because agreement provisions must be interpreted in accordance with applicable law, which the parties are presumed to have intended to follow.

The Company denies that this job was excluded from the unit because it operates computers. It notes that probably hundreds of jobs operate computers in this relationship and yet are in the bargaining unit. Rather it was what the incumbent has to know and to do in all situations to produce quality strip that justified placement of the job out of the unit.

In addition to the three bargaining unit operating jobs and the Foreman Engineer, there also is a regular Turn Foreman assigned to the line, and he is so assigned on all except down turns, when only a Foreman Engineer or a Turn Foreman is present.

The Company says there is a division of responsibility and that the Turn Foreman is to see that the line is supplied with steel and to supervise the mechanical crew (Millwrights and Welders) when called to work on the line. He also is a dominant figure in trouble-shooting difficulties on the line, especially at the entry end, and in contacting other areas of the mill. Those responsibilities take him all along the line.

Management says the Foreman Engineer is to supply the supervision missing during absence of the Turn Foreman and to see that quality production is made on the line. He is in control of the annealing process in a way that the Turn Foreman is not.

The line of authority on the continuous annealing line starts with the General Foreman, and goes to the Turn Foreman next, and then to the Foreman Engineer. The General Foreman said the Turn Foreman is the final authority out at the line. He has been trained on the annealing process but not on the math models. The Foreman Engineer takes part with the crew in remedying strip breaks, and the Company says he does that to the same extent as does the Turn Foreman. This covers button-pushing to jog the line, as well as physically tugging and hauling.

General Foreman Cundiff said the Nos. 1 and 2 Continuous Annealing Lines were not identical or similar to this operation, because this one is a generation or thirty years later in technological development and sophistication.

The Union stresses that when job descriptions were being considered by the parties, it was proposed that the Delivery Operator would relieve the then Operator Technician, now Foreman Engineer, as required, and that such relief still is provided by the Delivery Operator from time to time. The Foreman Engineer will leave the pulpit, and the Delivery Operator will carry on and operate the line. Cundiff said that occurs when it is thought that the line is in and would stay in a steady-state operation, so that little or no intervention of the furnace-control system would be required.

The Union next stressed that the Foreman Engineer never has performed the supervisory duties listed in its description, that is, disciplining employees, handling employee grievances, making out employee work schedules, or scheduling employee vacations. The Company replies that no employee on this operation ever has been disciplined as yet. Only two or three formal grievance complaints have been filed, and no safety violations have been charged.

The Union notes also that the job does considerable trouble-shooting, which often requires that it go out of the pulpit and physically check and change conditions at the line. This includes the Foreman Engineer's putting on gloves and aiding the crew in strip breaks, checking spray headers, and cleaning rolls. The Company replies that supervisors at all line operations customarily assist in comparable activities. The Company says this would include also a supervisor's manipulating steering controls in order to analyze whether or not they were working properly. On strip breaks that would include the supervisor's pushing and pulling on the strip to help get in the pickle or galvanize line, and raising a wringer roll to see if it was contributing to strain on the strip or to a quality problem.

General Foreman Cundiff said that a supervisor at No. 2 Continuous Annealing Line, for example, would adjust temperatures there by walking over to a valve and adjusting the amount of steam and then looking at a guage, while on this line that would be done by the Foreman Engineer's key-stroking to adjust setpoints on the Fisher-Provox instrumentation system.

Cundiff agreed the Foreman Engineer starts and stops the line, controls speed, monitors strip, and analyzes and adjusts setpoints.

The Company argues that the essence of its position here is that the incumbent of this job must master so much and such very difficult technical knowledge that it has gone beyond what is conventionally known as production work and has gotten into the very technical aspects of heat-treating steels, so as to be a "technical employee," similar to other technical employees at this plant who are excluded from the bargaining unit.

The Company witness who was responsible for developing the specifications for the entire computer system on this line said it was a highly interactive, "modern" or "optimal" control system, as opposed to a "classical" or "conventional" control system. He said in a conventional system the determination of what changes to make, if any, would be based on observation of the thing controlled after it has been completed, so that adjustments would affect things made thereafter, whereas in an optimal system adjustments are determined by a theoretical calculation of what is being produced in the operation while it is being produced, so that it can be corrected before it is completed.

The Company says the Foreman Engineer must understand all control algorithms for the automatic striptemperature control system, for example, in order to be able properly to interact at the interface in order to change an algorithm when going from a heavy-guage coil to a light-guage coil. At that time the furnace naturally would undergo radical changes, and there would be speed changes, as well. In order to assure proper strip-temperature profile during that change, the Foreman Engineer, understanding the algorithms, would tune parameters within the system, by adjusting heat-transfer differential equations.

This computer system has about 50 boiler-plate displays and approximately 100 custom displays. The job would have to be familiar with about 700 tuning variables.

The Union offered a comparison with seven other jobs in other firms in the industry, noting that they operated various processes with the aid of computers and nevertheless were in the bargaining unit. It called attention also to MJCs 598 and 599, Furnace Operators (BOF), and 639, 640, and 641, Automatic Rolling Attendants. The Union introduced four Inland jobs, three Furnace Operators and a Tandem Mill Operator, all of which are said to use computers and still were kept within the bargaining unit.

Helpful impressions of this continuous-annealing operation were obtained on a tour of the line with the parties' representatives after the hearing, and a similar group gained a basis for comparison by a like tour of Bethlehem's Continuous Heat Treating Line.

FINDINGS

It is unnecessary to enlarge on the enormously sophisticated and complicated computer operations (called interfacing) that this position must engage in. Only the skeleton of those duties has been set out in Background, but they are enough to establish that the position requires a "technical employee," within the language of paragraph 5.1. That is too obvious to admit of reasonable argument to the contrary and, indeed, there is none. The Union agrees the position calls for a "technical employee." Accordingly, if that were all there were to this Agreement or these facts, the position would be excluded from the bargaining unit, and the grievance would have to be denied.

The Company's contention that the position is a "foreman" within paragraph 5.1 is not nearly so clear. It began in Management's mind in January of 1983 as an exempt salaried position, called "Operator Technician." The parties were discussing and agreeing on manning of the new operation through the spring of that year, and they settled on three bargaining unit jobs to handle the several different segments of the operation, beneath the top responsibility. Those discussions disclosed Supervision's intention to man a fourth function, called Operator Technician, to be responsible for running the line with aid of the computers in the control systems. The parties' agreement on manning of the other three jobs within the bargaining unit included authority for the Union to dispute placement of the Operating Technician outside the bargaining unit, and the Union did so by this grievance on April 8, 1983.

It may be significant that originally and up to some time in the late spring or early summer, the Company's announced justification for placing the Operating Technician outside the bargaining unit was solely on the basis of its highly technical requirements. It was after this grievance challenged that conclusion that Management decided that the position had better carry supervisory duties, also. Whether or not that decision was caused by Company concern that the technical aspects of the position, alone, might not

support its putting the job outside the unit cannot be decided on this record. The Union suspects that was the case.

In any event, on August 1, 1983, a whole range of typically supervisory functions was added to the description of the position, and its title was changed from Operating Technician to Foreman Engineer. If the position actually were meant by Management to be a Foreman, then it would be within paragraph 5.1 for that reason, as well, and thus would have two paragraph 5.1 bases for exclusion, the "technical employee" and the "foreman" justifications.

The Union is not convinced, however, that the position really was meant to be a true foreman. It suggests the "supervisory" duties were put in the description and its title changed in August, some months after it was put together initially and under a nonsupervisory title, solely as a paper addition and as a make-weight for a prior conclusion that Management feared was not going to withstand rational analysis. That is why the Union stresses that in a period of over seventeen months the position has exercised hardly any of the broad smorgasbord of supervisory functions added in August of 1983.

The Company replies with NLRB decisions stating that a position's mere possession of supervisory responsibility is sufficient to warrant its exclusion from the unit, whether or not such authority ever is exercised. Let that be assumed for purposes of discussion here, without so deciding. It still is clear that supervisory functions were put in the description. The question is, however, whether they were put there intending that they be performed or were put there as window-dressing to support exclusion of the position from the unit and as mere paper additions.

In that respect, it is quite relevant that very few such duties, if any, ever have been exercised by the job. It is equally suspicious that there already was a regular Turn Foreman assigned to the line, directly under the General Foreman, and that Turn Foreman, of course, had and exercised all ordinary supervisory duties of such a position over all employees in this operation, including supervision of this Foreman Engineer. It thus was not easy to see what supervision was left to be done by the Foreman Engineer, who was very busy running the continuous annealing operation in any event.

The Company says the Foreman Engineer has exercised hardly any of his supervisory responsibilities only because the grievance has an element of prematurity in it, in that it was filed before the debugging and shakedown were finished. The Company contends also that it decided the job should have supervisory authority so that the three bargaining unit jobs directly operating other special segments of the process and which are either "directed" or "supervised" by the Foreman Engineer, would be obedient without hesitation. But scores of bargaining unit jobs throughout the plant exercise "direction" over other bargaining unit jobs, without apparent difficulty in having their "directions" heeded without hesitation. Surely, if employees on this operation were not responding in timely fashion to directions of this position, Management would have ample authority to correct that, short of putting the function entirely out of the bargaining unit.

Moreover, many of the duties of this Foreman Engineer, which the Company says are done also by other Inland foremen on other operations and by the Turn Foreman here, may have a flavor different in relevant ways from the tasks done by this position. That is, there was a suggestion running through the testimony about what other foremen would do that would describe their assisting in some tasks, their helping out when the bargaining unit jobs that regularly handle those duties were stuck or needed an extra pair of hands for a few seconds' help. That is not the context in which this position performs those duties. If any one of scores of different problems should arise in this operation, the Foreman Engineer is the one responsible, with the three other jobs, to solve them, not as a secondary helper but as the primary actor responsible for total completion of the tasks by immediate, hands-on, physical activity. In contrast, testimony as to foremen at other operations and as to the Turn Foreman here carried some suggestion at least that they were only secondary helpers for a very short time.

On a possibly related point, some of the factors cited by the Company are applicable to the Foreman Engineer position simply because Management put it outside the unit. It is not outside the unit because it has those attributes. For example, the position may work overtime and not receive overtime pay for the first four hours, and it has been required to study training manuals at home and on its own time. But that does not tend to prove the position properly was excluded from the unit. The position has those attributes because it was excluded; its having them did not cause it to be excluded.

Accordingly, the Company position is noticeably weak on the point of supervisory duties. But the case would not turn on that point. That is, it clearly calls for a "technical employee" and, therefore, would be excluded on that ground under paragraph 5.1, with or without additional, supervisory duties. Consequently, the position would be no more excluded from the bargaining unit as a "foreman" if it really were meant to have and to exercise supervisory duties than it would be as requiring a "technical employee," with no

supervisory duties. Hence, whether or not the position realistically was meant to have and exercise supervisory duties would not change the result, since it obviously calls for a "technical employee," and would be excluded under paragraph 5.1 for that reason, alone.

It seems that, whatever the Fair Labor Standards Act may dictate or permit and whether or not the National Labor Relations Board would decide, for election purposes, that this position were a supervisor, manager, or technician, nothing in that Act or in the Board's statutes would prohibit these parties from agreeing in advance to placement of a bundle of duties in or out of the unit when the bundle includes a combination of duties, some of which would be out of the unit if they stood alone and some of which clearly would be in the unit if they stood alone.

That is what paragraph 5.3 deals with, and it presents the dispositive question here. It is clear and has been found that the job requires technical duties, and it may be assumed for present purposes, without so finding, that it has supervisory authority, as well. It then becomes necessary to analyze the Union's basic contention that the Foreman Engineer also has a significant amount of production and maintenance work. If it does, it must be in the unit under paragraph 5.3, even though it has other, nonproduction and nonmaintenance duties.

The Company says flatly that none of the position's duties belong in the bargaining unit. But that simply cannot be taken seriously. First, much of what the Company has called "supervisory," and which thus found itself mixed up in that argument, appears pretty clearly to be the hands-on daily activity of this job in operation of the continuous annealing line. For example, the description says that the job "Supervises . . . operation of the furnace combustion and zone heating computer control systems . . . " That refers to its and the computer's operation of the line, and there are other, similar examples of the job's allegedly "supervising" operation of machines. It is not evident that a human can "supervise" a process. Similar statements run throughout the description. It says the job "Supervises . . . operation of the furnace cooling computer control systems . . . "and that it "Monitors mechanical properties of the finished strip product . . . " That describes the job's physically determining that it and the computer are turning out acceptable product. The description says the job inspects the unit to ensure good operating order. All "Operator" jobs must do that. It prepares turn reports of problems incurred and repairs that are necessary, as do scores of bargaining unit jobs. It is responsible for safe and efficient shutdown of the furnace, as Operator jobs traditionally are. Should the strip begin to turn blue, it would indicate that oxygen must have gotten into the furnace. The job must detect that, go out to the line and try to find out how oxygen got into the process, and change things so that it thereafter would be kept out. Should a pilot light go out, the encumbent must go out and find out why it did, correct that, and re-light it. If scratches develop on the strip, the encumbent must go out, try to find out what is causing them, and correct the situation. If wavy edges show up on the strip, the Foreman Engineer must go out to the line and perhaps adjust the quench process. Should there be tracking problems, the job must manually adjust the steering rolls. The job has many, ordinary production duties in starting up and shutting down the line.

A Company witness agreed that the job checks the line-up of coils to be run, monitors water temperature, directs the Delivery Operator to change line speed, monitors and adjusts furnace temperatures, controls and monitors furnace atmosphere, checks acid concentration, monitors and controls flow and pressure of gas in the furnace, and adjusts strip tension.

There are more such duties in the Job, but that is sufficient to show that it possesses enough ordinary, hands-on, operating duties to qualify as a significant amount of production and maintenance work, under paragraph 5.3. The above examples have been selected in an attempt to avoid those which the Company contends, with reason, are technical duties, and also to ignore those that Management here has claimed, sometimes with less reason, are supervisory duties. That is, this job works physically with gloves on in pushing strip, if a hand were needed, and in jogging it by operating controls, when necessary in helping the other three jobs in repairing strip breaks. It performs some similar duties on downturn repair work. None of that has been relied upon here, however, since the Company has insisted that such work is not inappropriate for Inland foremen because all Inland foremen do it. It has not been utilized in this analysis for the further reason that it has been unnecessary to rely on such duties in order to demonstrate that the job does have a significant amount of production and maintenance work. There is more than enough, aside from technical and even from a rather generously expanded idea of what is supervisory, to establish that point. Finally, on this matter, it is clear that the many examples, above, involve production and maintenance work that is performed on bargaining unit jobs in this relationship.

Thus, the Foreman Engineer does have a significant amount of the kind of production and maintenance work covered by paragraph 5.3, and, hence, even though it also has technical and, let it be assumed, supervisory duties, it follows that the combination requires that it be in the bargaining unit. The Company charges that reasoning would read paragraph 5.1 out of the Agreement. But that does not make sense. Surely, Section 1 of Article 5 means something with paragraph 5.3 in it other than what it meant without 5.3. If it be important not to read a provision out of the Agreement, and it is, it may be observed that the Company's arguments would appear to read 5.3 out of the Agreement. With only 5.1, if a bundle of duties were purely technical, the position would be excluded from the unit. Even if the bundle included a significant amount of production and maintenance work in addition to technical duties, the combination still would be excluded from the unit, and such combinations often were. But, with later advent of 5.3, if the bundle of duties were purely technical or supervisory, or both, it would be excluded under 5.1 and, on those facts, there would be nothing for 5.3 to act upon. If, however, the duties involved a combination of technical, or supervisory, or both kinds of duties, as here, and if they involved also a significant amount of production and maintenance work, as here, then 5.3 comes into play and requires that the job be in the unit. That does not read 5.1 out. It allows each of 5.1 and 5.3 to operate within their appropriate spheres.

It should be made clear that nothing said here has relied in any significant way upon comparisons with Bethlehem's Heat Treating Line. The facts of different collective bargaining relationships, different agreements, and possibly different operations are sufficient to place such comparisons beyond confident reliance.

Accordingly, since the Foreman Engineer includes a combination of technical, possibly some supervisory, and a significant amount of production and maintenance work, its placement outside the bargaining unit was in violation of paragraph 5.3, and the job must be established within the bargaining unit and offered for bid by bargaining unit employees according to the parties' view of Article 13 if they have not agreed otherwise, and appropriate employees must be made whole. The grievance will be sustained to that extent. AWARD

The grievance is sustained as stated in the last paragraph of the accompanying Opinion. /s/ Clare B. McDermott Clare B. McDermott Arbitrator