

# ANACONDA

September 21, 1979

Mr. Walter P. Haass, Chief  
Quality Assurance Branch  
Division of Project Management  
United States Nuclear Regulatory Commission  
Washington, D.C. 20555

Dear Mr. Haass:

SUBJECT: Revision of AWC-75-A  
Referring to your letter of August 27, 1979  
Phone call to Mr. Spraul of September 19, 1979

Please find enclosed a complete re-submittal of four (4) copies of the 45 proposed changes for Revision 2 of the Anaconda Topical Report AWC-75-A which was originally submitted August 1, 1979.

This complete re-submittal is identical to the original submittal with the exception of the four (4) changes referenced in your letter of August 27, 1979 which have been modified plus one additional modification which did not show up in the original submission.

The dates on all changes have been revised to reflect the same date as the modifications which are offered.

The four (4) changes which required modification have been rewritten and one (1) additional modification has been incorporated, these rewrites have been discussed with Mr. Spraul and are generally acceptable. The changes are as follows:

- 1) Change Number 9 - The title "Plant Design Organization" is incorrect. This would indicate that the group designs plants. Actually the group designs product. Therefore, we propose to change 1.8 and 1.8.1 to the title "Product Design Organization."
- 2) Change Number 25 - The wording has been changed in the "Proposed Language" to show that purchase orders for critical raw materials are not released until after Quality Assurance review.
- 3) Change Number 32 - Additional wording has been incorporated to show that material is not released for shipment pending satisfactory completion of tests.

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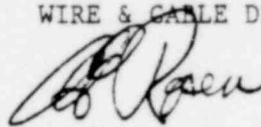
Mr. Haass  
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- 4) Change Number 33 - The phraseology "a direct effect" has been changed to "an effect."
- 5) Change Number 36 - Additional language has been added to state that access to calibration standards will be controlled by the calibration personnel.

In addition to the above, we also make the committment that Anaconda will provide a rewrite of the Topical Report to the Quality Assurance Branch, Division of Project Management, United States Nuclear Regulatory Commission before 1981. The rewrite of the Topical Report will follow the format of the Standard Review Plan, Revision 1.

Yours very truly,

THE ANACONDA COMPANY  
WIRE & CABLE DIVISION



A. E. Rosen  
Manager - Power Cable Quality Assurance

AEP:mn

Enclosures

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PROPOSED CHANGE  
FOR  
ANACONDA  
QUALITY ASSURANCE MANUAL  
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GENERATING STATION CABLES  
TOPICAL REPORT AWC-75

Change Number 1 of 45

Date September 21, 1979

Section Number ALL Paragraph Number(s) \_\_\_\_\_

PRESENT LANGUAGE

In each criteria a direct copy is made from ANSI N45.2-1971 of that criteria in italics.

REASON FOR CHANGE

The American Society of Mechanical Engineers as the custodian for the ANSI specifications have advised that the new publication ANSI N45.2-1977 is a copyrighted document and cannot be copied.

PROPOSED LANGUAGE

Direct copies from ANSI N45.2-1977 will not be shown in the revision of the Topical Report.

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PROPOSED CHANGE  
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QUALITY ASSURANCE MANUAL  
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GENERATING STATION CABLES  
TOPICAL REPORT AWC-75

Change Number 2 of 45

Date September 21, 1979

Section Number SCOPE

Paragraph Number(s) i

PRESENT LANGUAGE

Reference is made to "ANSI N45.2-1971".

REASON FOR CHANGE

ANSI has been up-dated to a newer version.

PROPOSED LANGUAGE

ANSI N45.2-1977

PROPOSED CHANGE  
FOR  
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Change Number 3 of 45 Date September 21, 1979

Section Number 1 Paragraph Number(s) 1.3.2.1

PRESENT LANGUAGE

1.3.2.1 Establish and publish all Corporate Quality Assurance Policies and issue interpretations of them in writing to all corporate holders of that document as may be required.

REASON FOR CHANGE

To show that the Corporate Policies are approved by the Corporate President.

PROPOSED LANGUAGE

1.3.2.1 Establish and publish all Corporate Quality Assurance Policies and issue interpretations of them in writing to all corporate holders of that document as may be required. Corporate Policies shall be approved by the Corporate President prior to publication.

PROPOSED CHANGE  
FOR  
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Change Number 4 of 45

Date September 21, 1979

Section Number 1

Paragraph Number(s) 1.4.2.4.1

PRESENT LANGUAGE

1.4.2.4.1 "Audits shall be conducted at least annually at all Power Cable Facilities and as necessary at other Power Cable operations. This includes distribution centers and warehouses."

REASON FOR CHANGE

The first sentence of the present language says it all. The second sentence is redundant and is unnecessary. The proposed language is:

PROPOSED LANGUAGE

1.4.2.4.1 "Audits shall be conducted at least annually at all Power Cable manufacturing facilities and as necessary at other Power Cable operations."

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Change Number 5 of 45

Date September 21, 1979

Section Number 1

Paragraph Number(s) 1.5.1

PRESENT LANGUAGE

- 1.5.1 Each plant shall have a Quality Assurance Manager who shall report to the Plant Manager for the administrative operation of his department. He shall have a clear access to the Plant Manager, sufficient authority to ensure that quality requirements are consistently maintained, and freedom to make quality decisions without pressure or bias.

REASON FOR CHANGE

Variations in organizations and titles between different locations makes it necessary to reword this paragraph. Appendix B states that the persons and organizations performing Q.A. functions shall report to a management level such that required authority and organizational freedom including sufficient independence from cost and schedule when opposed to safety considerations are provided. Organizational reporting does fulfill this requirement at Anaconda.

PROPOSED LANGUAGE

- 1.5.1 Each plant shall have a Quality Assurance Manager who shall have clear access to and report to a level of Management within his operation for administrative operation of his department which will grant him sufficient authority to ensure that quality requirements are consistently maintained and give freedom to make quality decisions without pressure or bias.

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Change Number 6 of 45

Date September 21, 1979

Section Number 1

Paragraph Number(s) 1.6.3.1

PRESENT LANGUAGE

1.6.3.1 Personnel selected for Quality Assurance positions must be qualified to carry out their jobs to which they are assigned. No wage incentive plan shall be allowed for the compensation of personnel in the Quality Assurance Department. Personnel selected for inspection examination and testing shall have experience or training in the performance of the inspections and tests that they are required to perform. They shall be familiar with the inspection examination and testing equipment to be employed and shall have demonstrated proficiency in their use. Documentation will be maintained of each individual person verifying that proficiency has been established.

REASON FOR CHANGE

Due to the fact that personnel are not selected for Q.A. jobs but rather bid on jobs based on seniority in accordance with a Union contract it is necessary to rewrite this paragraph.

PROPOSED LANGUAGE

1.6.3.1 Personnel employed for inspection, examination and testing shall have experience or training in the performance of the inspections and tests that they are required to perform. They shall be familiar with the inspection, examination and testing equipment to be employed and shall have demonstrated proficiency in their use. Documentation will be maintained of each individual person verifying that proficiency has been established. No wage incentive plan shall be allowed for the compensation of personnel in the Quality Assurance Department.



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Change Number 7 of 45

Date September 21, 1979

Section Number 1

Paragraph Number(s) 1.6.4 & 1.6.4.1

PRESENT LANGUAGE

1.6.4 Pledges

- 1.6.4.1 Each member of the Quality Assurance Department, including the Quality Assurance Manager, staff members, inspectors, testers, preparers, etc. is required to sign an Inspector's Pledge, form PC 1998 (see Exhibit #2), upon his or her admission to the Quality Assurance Department. These pledges, after being signed are to be notarized in accordance with instructions shown at the bottom of the pledge and forwarded to the Power Cable Manager of Quality Assurance for permanent file. This procedure is adopted as evidence of the employee's recognition of his personal obligation in discharging his duties.

REASON FOR CHANGE

This requirement which appears in the Topical Report is an internal requirement and is not a part of 10CFR50, Appendix B or ANSI N45.2. For this reason this entire section is being dropped from the Topical Report.

PROPOSED LANGUAGE

None.

PROPOSED CHANGE  
FOR  
ANACONDA  
QUALITY ASSURANCE MANUAL  
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GENERATING STATION CABLES  
TOPICAL REPORT AWC-75

Change Number 8 of 45 Date September 21, 1979

Section Number 1 Paragraph Number(s) 1.6.5.1

PRESENT LANGUAGE

1.6.5.1 Training sessions shall be conducted on a regular continuing schedule.

REASON FOR CHANGE

This sentence is highly restrictive. Interpretation of the wording of the sentence would indicate that a specific schedule is established and is inflexible. To eliminate the chances of mis-interpretation this particular paragraph is changed.

PROPOSED LANGUAGE

1.6.5.1 Training sessions shall be conducted as required on a continuing basis.

PROPOSED CHANGE  
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Change Number 9 of 45 Date September 21, 1979

Section Number 1 Paragraph Number(s) 1.7

PRESENT LANGUAGE

1.7 Plant Engineering and Design Organization

1.7.1 The Plant Engineering Manager shall report to the Plant Manager for administrative and functional direction.

1.7.2 The Plant Engineering Manager has the following authorities and responsibilities.

1.7.2.1 To establish and maintain systems which comply with those sections of this Quality Assurance Manual which are applicable to the engineering managerial function.

1.7.2.2 To maintain liaison with the Quality Assurance organization.

1.7.2.3 To establish and direct the operation of Process and/or Product Engineers. The function of the Process and/or Product Engineer is to provide engineering assistance to the manufacturing personnel and develop new processes from a manufacturing aspect. In conjunction with these responsibilities, manufacturing standards are issued by the Process and/or Product Engineers and are issued only after approval by the Chief Process and/or Product Engineer.

1.7.2.4 Establishing and directing the design function of the Specification Group. The function of the Specification Engineers is to prepare the design sheet which will be used for manufacturing of product for each customer's order. The design sheet, MSO/EN is prepared in accordance with Section 3, paragraph 3.2 of this manual.

REASON FOR CHANGE

10CFR50, Appendix B and ANSI N45.2 both reference the organizations responsible for functions. By naming titles of a department limits the internal organization of a facility. As an example of Manufacturing Manager, Production Manager or Superintendent names three different titles where as the function and responsibilities of each are the same. So long as function, systems and authorities as described within this manual are maintained the requirements of 10CFR50, Appendix B and ANSI N45.2 are met.

By making the proposed changes the numbering system of section 1 will be modified to take this into account.

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Section Number 1 Paragraph Number(s) 1.7

PROPOSED LANGUAGE

1.7 Plant Engineering/Technical Organization

1.7.1 The Plant Engineering/Technical organization has the following authorities and responsibilities:

- 1.7.1.1 To establish and maintain systems which comply with those sections of this Quality Assurance Manual which are applicable to the Engineering Organizational function.
- 1.7.1.2 To maintain liaison with the Quality Assurance Organization.
- 1.7.1.3 To establish and direct the operation of Process and/or Product Engineers. The function of the Process and/or Product Engineer is to provide engineering assistance to the manufacturing personnel and develop new processes from a manufacturing aspect. In conjunction with these responsibilities, manufacturing standards and/or manufacturing instructions are issued by the Process and/or Product Engineers and are issued only after approval by an authority level with the responsibility for that function.

1.8 Product Design Organization

1.8.1 The Product Design Organizations have the following authorities and responsibilities:

- 1.8.1.1 To establish and maintain systems which comply with those sections of this Quality Assurance Manual which are applicable to the Design Organization functions.
- 1.8.1.2 To maintain liaison with the Quality Assurance Organizations.
- 1.8.1.3 To establish and direct the operation of the Designers. The function of the Designers is to prepare the design sheet which will be used for manufacturing of product for each customer's order. The Design sheet, MSO/EN, is prepared in accordance with Section 3, paragraph 3.2 of this manual.

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Change Number 10 of 45 Date September 21, 1979

Section Number 1 Paragraph Number(s) 1.10

PRESENT LANGUAGE

1.10 Plant Manufacturing Organization

- 1.10.1 The Plant Production Manager and the Plant Materials Manager report to the local plant manager for function and administration.
- 1.10.2 The Plant Production Manager and the Plant Materials Manager have the following authorities and responsibilities.
- 1.10.2.1 To establish and maintain systems which comply with those sections of this Quality Assurance Manual which are applicable to the production managerial and materials managerial functions.
- 1.10.2.2 To maintain liaison with the Quality Assurance organization.
- 1.10.2.3 To direct and verify that all manufacturing operations are in accordance with current design and production standards.
- 1.10.2.4 To direct that only accepted material is used within the manufacturing facility.
- 1.10.2.5 To verify that standard practices, procedures and manufacturing standards are totally complied with.

REASON FOR CHANGE

10CFR50, Appendix B and ANSI N45.2 both reference the organizations responsible for functions. By naming titles of a department limits the internal organization of a facility. As an example of Manufacturing Manager, Production Manager or Superintendent names three different titles where as the function and responsibilities of each are the same. So long as function, systems and authorities as described within this manual are maintained the requirements of 10CFR50, Appendix B and ANSI N45.2 are met.

By making the proposed changes the numbering system of section 1 will be modified to take this into account.

Section Number 1Paragraph Number(s) 1.10PROPOSED LANGUAGE

## 1.10 Plant Manufacturing Organization

1.10.1 The Plant Manufacturing Organization has the following authorities and responsibilities:

- 1.10.1.1 To establish and maintain systems which comply with those sections of this Quality Assurance Manual which are applicable to the Plant Manufacturing Organization.
- 1.10.1.2 To maintain liaison with the Quality Assurance Organization.
- 1.10.1.3 To direct and verify that all manufacturing operations are in accordance with current design and production standards.
- 1.10.1.4 To direct that only accepted material is used within the manufacturing facility.
- 1.10.1.5 To verify that standard practices, procedures and manufacturing standards are totally complied with.

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Change Number 11 of 45

Date September 21, 1979

Section Number 2

Paragraph Number(s) 2.4.2

PRESENT LANGUAGE

2.4.2 Inspection procedures shall be written for all standard products, and for non-standard products run in sufficient quantity to justify the use of inspection procedures.

REASON FOR CHANGE

By specifying the word all in the first line invokes the requirement that every standard product must have an inspection procedure. In many cases this is not desirable due to the fact that there many industry inspection procedures in publications such as ASTM, ANSI, UL, etc., that will cover standard products. There are also some standard products that are never produced although they are listed. For this reason paragraph 2.4.2 will be reworded to read:

PROPOSED LANGUAGE

2.4.2 An inspection procedure shall be written for standard products, and for non-standard products run in sufficient quantity to justify the use of inspection procedures. Whenever an inspection procedure is issued in a standard accepted industry specification such as ASTM, ANSI, UL, IPCEA, AEIC, Government Specifications, etc., these procedures may be used in lieu of internal procedures.

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Change Number 12 of 45 Date September 21, 1979

Section Number 2 Paragraph Number(s) 2.4.3

PRESENT LANGUAGE

2.4.3 Inspection procedures shall be written in terms simple enough to be understood by inspectors.

REASON FOR CHANGE

Poor language was used for this statement and this has been corrected in the proposed language.

PROPOSED LANGUAGE

2.4.3 Inspection procedures are to be written in terms capable of being understood by the inspectors and test operators.



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Change Number 13 of 45 Date September 21, 1979

Section Number 2 Paragraph Number(s) 2.5.1.1

PRESENT LANGUAGE

None

REASON FOR CHANGE

Refer to paragraph 2.4.2. In many accepted industry publications are adequate test methods which would eliminate the requirement that we have test methods for everything, therefore we propose to add this paragraph.

PROPOSED LANGUAGE

2.5.1.1 Whenever a test method is issued in a standard accepted publication such as ASTM, ANSI, U/L, IPCEA, AEIC, Government Specifications, etc., these test methods may be used in lieu of internal methods.

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Change Number 14 of 45 Date September 21, 1979

Section Number 2 Paragraph Number(s) 2.6.4

PRESENT LANGUAGE

2.6.4 Test forms shall be completely filled in and all entries must be clear and legible. When spaces are not used on the form the spaces shall have a large "X" or the letters "NA" applied to that section of the form showing that they have not been left blank inadvertently. Test forms are to be filled in using a ballpoint pen.

REASON FOR CHANGE

Due to the fact that there are many permanent types of markings other than ballpoint pen, the paragraph will be reworded.

PROPOSED LANGUAGE

2.6.4 Test forms shall be completely filled in and all entries must be clear and legible. When spaces are not used on the form the spaces shall have a large "X" or the letters "NA" applied to that section of the form showing that they have not been left blank inadvertently. Data on test forms is to be recorded using a non-erasable writing instrument.

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Change Number 15 of 45 Date September 21, 1979

Section Number 2 Paragraph Number(s) 2.7.1.4

PRESENT LANGUAGE

- 2.7.1.4 Qualification forms are filled out once the new operator has proven himself competent and the qualification form is made a part of the employee's personnel file. A qualification list is maintained for each employee listing those manufacturing equipments on which the employee is qualified to produce. Only qualified operators are permitted to operate manufacturing equipment. Management may disqualify operators who do not continue to meet the established quality standard.

REASON FOR CHANGE

There have been some questions in challenging about using the title "Qualification Forms". For this reason the wording has been changed to eliminate this objectional phrase.

PROPOSED LANGUAGE

- 2.7.1.4 Once the new operator has proven himself competent the qualification status is made a part of the employee's personnel file. A list is maintained for each employee listing those manufacturing equipments on which the employee is qualified to produce. Only operators qualified by management are permitted to operate manufacturing equipment. Management may disqualify operators who do not continue to meet the established quality standard.

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Change Number 16 of 45

Date September 21, 1979

Section Number 2

Paragraph Number(s) 2.7.2.2

PRESENT LANGUAGE

2.7.2.2 All inspectors work on a straight time basis; no wage incentives are used. This fact, together with the functional reporting of the Quality Assurance Manager to Power Cable Quality Assurance Headquarters, assures freedom from production pressure and allows inspectors ample time to perform all tests and inspections in a thorough manner.

REASON FOR CHANGE

The first statement is incorrect due to the fact that straight time means straight time. Whereas inspectors will also receive time and a half and double time depending upon when they are working.

PROPOSED LANGUAGE

2.7.2.2 No wage incentives are used in calculating an inspector or tester's wages. This fact, together with the functional reporting of the Quality Assurance Manager to Power Cable Quality Assurance Headquarters, assures freedom from production pressure and allows inspectors ample time to perform all tests and inspections in a thorough manner.

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Change Number 17 of 45 Date September 21, 1979

Section Number 3 Paragraph Number(s) 3.1

PRESENT LANGUAGE

- 3.1 Special designs to conform to customer requirements and specifications are outlined by the Specification Engineers, Process/Project Engineer or Product Manager prior to quoting to the customer. These special designs with any specification exceptions are submitted to the customer or user for his review and approval. Customer or user acceptance is demonstrated by order entry.

REASON FOR CHANGE

To eliminate titles the wording has been changed and to assure that only prototype designs and materials are used when the requirement for nuclear generating station class 1E is required.

PROPOSED LANGUAGE

- 3.1 Special designs to conform to customer requirements and specifications are outlined in the inquiry state in the quotation which is submitted to the customer. These special designs with any specification exceptions are submitted to the customer for his review and approval. For class 1E application only those materials and cable configurations will be used which have been subjected to and passed all qualification tests.

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Change Number 18 of 45

Date September 21, 1979

Section Number 3

Paragraph Number(s) 3.2.1

PRESENT LANGUAGE

3.2.1 The MSO, EN or SI is prepared by the Specification Engineers. The detailed information which includes the complete cable design, specification requirements and inspection and test acceptance criteria is assembled on the MSO, EN or SI using approved designs submitted to customer (3.1), design cards, or standing instructions as a basis for this information. The Specification Engineers also use the standards catalog, design standards, Specifications for Electrical Conductors, Machine Manufacturing Standards, and Compound Data Books.

REASON FOR CHANGE

Here again to eliminate confusion specific titles are being removed.

PROPOSED LANGUAGE

3.2.1 The MSO, EN or SI is prepared by the organization responsible for design. The detailed information which includes the completed cable design, specification requirements and inspection and test acceptance criteria is assembled on the MSO, EN or SI using approved designs submitted to the customer (3.1), design cards, or standing instructions as a basis for this information. The organization responsible for design also uses the standards catalog, design standards, Specification for Electrical Conductors, Machine Manufacturing Standards and Compound Data Books.

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Change Number 19 of 45 Date September 21, 1979

Section Number 3 Paragraph Number(s) 3.2.2

PRESENT LANGUAGE

3.2.2 The Specification Engineers retain in their files copies of the MSO, EN, SI and/or Stock Release Order. The correct number of copies of these publications are prepared by the appropriate production control function for distribution to each of the manufacturing and quality assurance areas.

REASON FOR CHANGE

To eliminate the reference to specific titles the paragraph is changed.

PROPOSED LANGUAGE

3.2.2 The organization responsible for design retain in their files copies of the MSO, EN, SI and/or Stock Release Order. The correct number of copies of these publications are prepared for distribution to each of the manufacturing and Quality Assurance areas.

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Change Number 20 of 45 Date September 21, 1979

Section Number 3 Paragraph Number(s) 3.2.3

PRESENT LANGUAGE

3.2.3 Prior to issuing the copies (3.2.2), the MSO, EN, or SI is checked for accuracy of design and specification requirements and is initialed as approved by the Chief or Senior Specification Engineer. The Quality Assurance Manager will also review the MSO, EN or SI for accuracy and completeness of quality assurance requirements. He will then initial the MSO, EN or SI as approved in the area provided for approval.

REASON FOR CHANGE

To provide for organizational differences and to eliminate specific titles the wording is modified.

PROPOSED LANGUAGE

3.2.3 Prior to issuing the copies (3.2.2), the MSO, EN or SI is checked for accuracy of design and specification requirements. This review may be performed by a specification engineer or the organization responsible for design, other than the originator, of the document. The reviewer will initial and date the MSO, EN or SI as approved. The Quality Assurance Manager or his designated representative will also review the MSO, EN or SI for accuracy and completeness of quality assurance requirements. He will then initial and date the MSO, EN or SI as approved in the area provided for approval.



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Section Number 3 Paragraph Number(s) 3.3

PRESENT LANGUAGE

3.3 Engineering & Research Specification Interpretation will be issued whenever a vague or ambiguous requirement of a specification necessitates clarification or deviation from a specification requirement as authorized by the customer. This form shall show:

REASON FOR CHANGE

The last sentence of this paragraph is vague and it will be modified.

PROPOSED LANGUAGE

3.3 Engineering & Research Specification Interpretation will be issued whenever a vague or ambiguous requirement of a specification necessitates a clarification or deviation from a specification requirement as authorized by the customer. This specification interpretation shall show:

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Date September 21, 1979

Section Number 3

Paragraph Number(s) 3.5

PRESENT LANGUAGE

- 3.5 Changes to the MSO, EN or SI are prepared by the Specifications Department, and copies of the change notice are distributed to holders of the original document. (Exhibit #8) Change notices may be issued to correct errors on the original MSO, EN or SI, to incorporate improved manufacturing procedures and/or materials, or to incorporate changes requested by the customer.

REASON FOR CHANGE

Because there are changes in names of the groups who perform operations the wording of this paragraph will be changed.

PROPOSED LANGUAGE

- 3.5 Changes to the MSO, EN or SI are prepared by the same group which prepared the MSO, EN or SI, and copies of the change notices are distributed to holders of the original document. (Exhibit #8) Change notices may be issued to correct errors on the original MSO, EN or SI, to incorporate improved manufacturing procedures and/or materials, or to incorporate changes requested by the customer.

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Section Number 3

Paragraph Number(s) 3.5.1

PRESENT LANGUAGE

3.5.1 All changes are reviewed by the Chief or Senior Specification Engineer and initialed as approved prior to being distributed. All changes which effect materials, design specifications and/or Quality Assurance requirements are also reviewed and initialed as approved by the Quality Assurance Manager prior to being distributed.

REASON FOR CHANGE

Again the use of titles can be confusing in that different locations may have different titles for the same function and for this reason the wording of this paragraph has been changed.

PROPOSED LANGUAGE

3.5.1 All changes are reviewed by the Specification Engineer or the organization which prepared the change. The reviewer will always be other than the originator of the document. The reviewer will initial as approved all changes prior to being distributed. All changes which effect materials, design specifications and/or Quality Assurance requirements are also reviewed and initialed as approved by the Quality Assurance Manager or his designated representative.

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Section Number 3 Paragraph Number(s) 3.5.2

PRESENT LANGUAGE

3.5.2 The individual receiving the change notice will initial next to the name of the department on the Specification Department copy that delivery has been made. The Specification Department copy will be maintained on file with the original MSO, EN or SI.

REASON FOR CHANGE

Again the reference to departments by a specific name such as Specification Department can cause confusion and the paragraph will be rewritten.

PROPOSED LANGUAGE

3.5.2 To document receipt of a change notice, the designated representative of the receiving department shall initial the originating departments copy certifying that delivery has been made. The originating departments copy will be maintained on file with the original MSO, EN or SI.

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Section Number 4 Paragraph Number(s) 4.6

PRESENT LANGUAGE

4.6 When discrepancies are found in purchase orders, a change order shall be issued correcting the discrepancy. All purchase change orders shall be reviewed and approved in the same manner as the original purchase order.

REASON FOR CHANGE

On non-critical raw materials to eliminate or reduce the time lag from the time a purchase order is written until it is received by the supplier the Quality Assurance review will be made after the purchase order has been mailed. The Quality Assurance review will always be done prior to receipt of the raw materials and with the controls of Section 7, Paragraph 7.3 no raw materials would be accepted unless it came from an approved purchase order.

PROPOSED LANGUAGE

4.6 Purchase orders for critical materials as defined in Section 8, Paragraph 8.3 will be reviewed by Quality Assurance prior to issuance. When discrepancies are found in purchase orders for critical materials the purchase order shall be corrected. Quality Assurance will review copies of purchase orders for non-critical materials which are retained by the Quality Assurance Department. When discrepancies are found in purchase orders of non-critical materials, a change order shall be issued correcting the discrepancy. All purchase change orders shall be reviewed and approved in the same manner as the original purchase order.

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PROPOSED CHANGE  
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Section Number 6

Paragraph Number(s) 6.1.4 & 6.1.5

PRESENT LANGUAGE

6.1.4 Plant Customer Service Department (Sales).

- a. Mill Orders and Changes to Mill Orders.
- b. Completed Advice to Sales forms.

6.1.5 Plant Specification Department (see Section #3).

- a. Inquiries, MSO's, EN's and SI's, Customer Specifications and Change Pages.

REASON FOR CHANGE

Due to differences within organizations we propose to change the wording of paragraph 6.1.4 combining it with 6.1.5 and deleting 6.1.5 as follows:

PROPOSED LANGUAGE

6.1.4 Plant Sales Service and/or Specification Departments.

- a. Mill orders and changes to mill orders.
- b. Completed Advice to Sales forms.
- c. Inquiries, MSO's, EN's and SI's, Customer Specifications and Change Pages.

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Change Number 27 of 45 Date September 21, 1979

Section Number 7 Paragraph Number(s) 7.3.4.1

PRESENT LANGUAGE

7.3.4.1 Test data from vendors shall be reviewed and stamped as accepted or rejected.

REASON FOR CHANGE

To make this paragraph more meaningful it will be reworded.

PROPOSED LANGUAGE

7.3.4.1 Test data from vendors shall be reviewed for compliance and completeness and stamped or initialed and dated as accepted or rejected.

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Section Number 7

Paragraph Number(s) 7.3.5.2

PRESENT LANGUAGE

7.3.5.2 Dispositions shall be made by the Technical Supervisor or other person performing that function. Possible dispositions may be:

REASON FOR CHANGE

To be consistent with titles as presently used within the Company the wording will be changed as follows.

PROPOSED LANGUAGE

7.3.5.2 Dispositions shall be made by the Technical or Engineering Manager or other person performing that function. Possible dispositions may be:



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Section Number 7 Paragraph Number(s) 7.4.1

PRESENT LANGUAGE

7.4.1 When completed products are delivered to a manufacturing plant, all the above procedures shall apply and approved material shall be stamped with an approved stamp denoting approval. All fabricated components or completed products purchased for resale shall include in the purchase requirement that the product where practical be identified as to the manufacturer.

REASON FOR CHANGE

To allow other methods of denoting approval the wording is slightly modified.

PROPOSED LANGUAGE

7.4.1 When completed products are delivered to a manufacturing plant, all the above procedures shall apply and approved material shall be stamped or tagged with an "APPROVED" stamp or tag denoting approval. All fabricated components or completed products purchased for resale shall include in the purchase requirement that the product where practical be identified as to the manufacturer.

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Date September 21, 1979

Section Number 8

Paragraph Number(s) 8.1

PRESENT LANGUAGE

8.1 Traceability of wire and cable manufactured is a requirement to:

REASON FOR CHANGE

To define the fact that traceability is a requirement for Nuclear Generating Stations the statement has been reworded.

PROPOSED LANGUAGE

8.1 Traceability of wire and cable manufactured for Nuclear Generating Station use is a requirement to:

PROPOSED CHANGE  
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Change Number 31 of 45 Date September 21, 1979

Section Number 8 Paragraph Number(s) 8.4.2.1 a.

PRESENT LANGUAGE

8.4.2.1 a. Material has been ordered to comply with an applicable specification.

REASON FOR CHANGE

The wording in this paragraph could be interpreted to be in conflict with the wording that is used in section 4, Procurement Document Control. To reduce the chance for mis-interpretation we will change the wording.

PROPOSED LANGUAGE

8.4.2.1 a. Material has been ordered in accordance with the conditions established in section 4 of this Quality Assurance Manual.

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Date September 21, 1979

Section Number 11

Paragraph Number(s) 11.4.1

PRESENT LANGUAGE

11.4.1 A log or control sheet shall be maintained in the Inspection Department to serve as a check-off sheet to ensure that samples are cut at the frequencies specified, that the material which is held pending completion of these tests is released when tests are completed satisfactorily and that proper action is taken when a failure is recorded.

REASON FOR CHANGE

The language in this paragraph is confusing when referring to paragraph 11.3.3 therefore, to clean up the paragraph the following wording will be used.

PROPOSED LANGUAGE

11.4.1 A log or control sheet shall be maintained in the Quality Assurance Department to serve as a check-off sheet to ensure that samples are cut at the frequencies specified. Material is not released for shipment pending satisfactory completion of these tests. In the event of a failure the procedures of Paragraph 11.3.3 are followed.

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Change Number 33 of 45 Date September 21, 1979

Section Number 12 Paragraph Number(s) 12.2

PRESENT LANGUAGE

12.2 Each plant shall implement a system for scheduled inspection, maintenance and calibration of process control instrumentation, such as temperature recorders and controllers, footage counters, speed measuring devices, weighing machines, etc.

REASON FOR CHANGE

Many pieces of equipment that are used as process instrumentation are for reference purposes only and have no effect on quality of product. Many of the instruments are used for speed measuring devices to determine wage rates. Other control instrumentation may be used for verifying machine operation which has no effect on product. Therefore, process control instrumentation which is not used for quality of product shall be identified "FOR REFERENCE ONLY". We propose to change the paragraph as follows.

PROPOSED LANGUAGE

12.2 Each plant shall implement a system for scheduled inspection, maintenance and calibration of process control instrumentation, such as temperature recorders and controllers, footage counters, speed measuring devices, weighing machines, etc., whenever a process control instrumentation will have an effect upon the product which is being produced on that equipment as determined by the Quality Assurance Department. Process control instrumentation which does not have an effect upon the product will be identified as "FOR REFERENCE ONLY."

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Change Number 34 of 45 Date September 21, 1979

Section Number 12 Paragraph Number(s) 12.8.3

PRESENT LANGUAGE

12.8.3 Primary Calibration of Test Equipment

12.8.3.1 Annually a contract will be issued to an outside laboratory to perform calibration of test apparatus. All major items of test equipment are to be calibrated. All secondary standards are also to be calibrated and this will enable manufacturing plants to conduct secondary calibrations.

12.8.3.2 These in-house calibrations are to be carried out by outside calibrating laboratories representatives who visit the plant, and use standards complying with the requirement of MIL-C-45662A, latest edition.

12.8.3.3 Test equipment which is found to be acceptable (within the acceptable limits of accuracy), will be given a calibration laboratory "Approved" sticker (Exhibit 13).

12.8.3.4 Test equipment which has been denied a calibration laboratory "Accepted" sticker shall not be used for acceptance testing until it has been repaired and recalibrated with the recalibration data on record.

12.8.3.4.1 When equipment has been returned to the manufacturer or other repair facility for repairs and adjustment, it shall be recalibrated by the agency doing the work, and this calibration shall be considered satisfactory until the next primary calibration due date.

REASON FOR CHANGE

This entire section is restrictive in that it permits calibration of test equipment only by an outside laboratory. Even though all calibrations are done by an outside laboratory there is a possibility that this could be done in-house by qualified personnel in accordance with written procedures following the necessary restrictions that are imposed by specifications, therefore, we propose to rewrite this entire section.

Section Number 12Paragraph Number(s) 12.8.3PROPOSED LANGUAGE

## 12.8.3 Primary Calibration of Test Equipment

- 12.8.3.1 A schedule shall be established for annual calibration of test apparatus. All major items of test equipment are to be calibrated. All standards are also to be calibrated and this will enable manufacturing plants to conduct secondary calibrations.
- 12.8.3.2 These in-house calibrations are to be carried out by qualified personnel using standards complying with the latest requirements of MIL-C-45662A, latest edition.
- 12.8.3.3 Test equipment which is found to be acceptable (within the acceptable limits of accuracy), will be given a calibration sticker (Exhibit 13).
- 12.8.3.4 Test equipment which has been denied a calibration laboratory "Accepted" sticker shall not be used for acceptance testing until it has been repaired and recalibrated with the recalibration data on record.
- 12.8.3.4.1 When equipment has been returned to the manufacturer or other repair facility for repairs and adjustment, it shall be recalibrated by the agency doing the work, and this calibration shall be considered satisfactory until the next primary calibration due date.

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Section Number 12 Paragraph Number(s) 12.8.4.1

PRESENT LANGUAGE

12.8.4.1 Secondary Calibrations will be performed by the Plant Quality Assurance Department on the test apparatus and at the minimum frequencies shown in Table I. (See Exhibit #14)

REASON FOR CHANGE

This paragraph is restrictive in limiting calibrations only by plant Q.A. Department. Paragraph 12.6 of this section permits calibration by either a qualified outside agency or by qualified Anaconda personnel. Therefore, the wording will be changed as follows.

PROPOSED LANGUAGE

12.8.4.1 Secondary Calibrations shall be performed by either a qualified outside agency or by qualified Anaconda personnel on the test apparatus and at the minimum frequencies in Table I. (See Exhibit #14)



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Section Number 12

Paragraph Number(s) 12.8.4.2

PRESENT LANGUAGE

12.8.4.2 All calibration standards will be kept in the Inspection Laboratory when not in use and stored in a locked cabinet. The words "Calibration Standards" will be painted on the face of the cabinet to denote that these are standards which must not be used in connection with normal testing or by unauthorized personnel. These standards shall be included in the annual primary calibration of test equipment by calibration laboratories.

REASON FOR CHANGE

Many times the size of the inspection laboratory is such where it is not practical to keep the locked cabinet in the inspection laboratory. As long as the locked cabinet is in a controlled area this should suffice and the wording will be changed.

PROPOSED LANGUAGE

12.8.4.2 All calibration standards will be kept in a controlled area when not in use and stored in a locked cabinet. The words "Calibration Standards" will be painted on the face of the cabinet to denote that these are standards which must not be used in connection with normal testing or by unauthorized personnel. Access to these calibration standards will be controlled by the calibration personnel. These standards shall be included in the annual primary calibration of test equipment by calibration personnel.

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Section Number 15 Paragraph Number(s) 15.4.1.1 & 15.4.1.2

PRESENT LANGUAGE

- 15.4.1.1 The Production Manager reviews the nonconforming material and disposes of those cases for which no corrective action is indicated.
- 15.4.1.2 The Quality Assurance Manager reviews those cases on nonconforming material and disposes of those for which no corrective action is indicated and which have not been disposed of by the Production Manager.

REASON FOR CHANGE

Here again we are referring to specific titles wherein we are actually referencing organizations. To eliminate chance for mis-interpretation the wording is changed.

PROPOSED LANGUAGE

- 15.4.1.1 Manufacturing Management reviews the nonconforming material and disposes of those cases for which no corrective action is indicated.
- 15.4.1.2 The Quality Assurance Manager reviews those cases on nonconforming material and disposes of those for which no corrective action is indicated and which have not been disposed of by the Manufacturing Manager.

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Section Number 15

Paragraph Number(s) 15.9.2

PRESENT LANGUAGE

15.9.2 The Engineering Manager and/or Chief Engineer will determine and verify that the deficiency is such that it should be offered to the customer. In this event only, will an Advice to Sales form, Exhibit #19, be completed by the Engineering Manager and/or Chief Engineer who is stating that in his opinion the material is serviceable for the purpose for which it is intended. This Advice to Sales procedure is generally not used for low insulation walls or low conductor circular mil area on power cables.

REASON FOR CHANGE

Again a title of Engineering Manager is used wherein this could be a Technical Manager so to eliminate any chance of mis-interpretation the wording is changed.

PROPOSED LANGUAGE

15.9.2 Engineering/Technical Management and/or Chief Engineer will determine and verify that the deficiency is such that it should be offered to the customer. In this event only, will an Advice to Sales form, Exhibit #19, be completed by the Engineering/Technical Management and/or Chief Engineer who is stating that in his opinion the material is serviceable for the purpose for which it is intended. This Advice to Sales procedure is generally not used for low insulation walls or low conductor circular mil area on power cables.

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Section Number 15 Paragraph Number(s) 15.9.3

PRESENT LANGUAGE

15.9.3 The Advice to Sales form, Exhibit #19, is presented to the Plant Manager and the Customer Service Manager for their consideration for offering to the customer. If decisions are made that the material is to be offered to the customer, this will be handled through the Customer Service Department and the Anaconda District Sales Office servicing the account.

REASON FOR CHANGE

Customer Service Department is a misnomer and it is actually a Sales department.

PROPOSED LANGUAGE

15.9.3 The Advice to Sales form, Exhibit #19, is presented to Plant Management and to Sales Management for their consideration for offering to the customer. If decisions are made that the material is to be offered to the customer, this will be handled through the Sales Service Department and the Anaconda District Sales Office servicing the account.

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Section Number 16 Paragraph Number(s) 16.4

PRESENT LANGUAGE

16.4 A Corrective Action Committee shall be established at the manufacturing plant to discuss and take necessary action on all deficiencies requiring long term corrective action. The committee shall be composed of at least the Engineering, Quality Assurance and Manufacturing Managers who shall have sufficient authority to recommend and take the necessary corrective action. The authority of the committee is confined to determination of long term corrective action, putting it into effect and seeing that it is done. The committee shall meet whenever a nonconformance requiring long term corrective action is referred to them by the Material Review Board.

REASON FOR CHANGE

Again Manager titles are used whereas later on within this section we are referring representatives.

PROPOSED LANGUAGE

16.4 A Corrective Action Committee shall be established at the manufacturing plant to discuss and take necessary action on all deficiencies requiring long term corrective action. The committee shall be composed of at least the Engineering, Quality Assurance and Manufacturing representatives who shall have sufficient authority to recommend and take the necessary corrective action. The authority of the committee is confined to determination of long term corrective action, putting it into effect and seeing that it is done. The committee shall meet whenever a nonconformance requiring long term corrective action is referred to them by the Material Review Board.

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Section Number 17 Paragraph Number(s) 17.5

PRESENT LANGUAGE

None.

REASON FOR CHANGE

To specify the minimum requirements for storage facility of records.

PROPOSED LANGUAGE

17.5 Record Storage Facility

- 17.5.1 Record storage facilities shall be constructed and located to protect the contents from possible destruction.
- 17.5.2 All records will be stored in a suitable cabinet fully protected.
- 17.5.3 Duplicate records on microfilm shall be maintained and stored in a separate remote location from the area where the original records are stored.
  - 17.5.3.1 Microfilm storage shall be maintained in an environment which is recommended by the film manufacturer.

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Section Number 18 Paragraph Number(s) 18.3.1

PRESENT LANGUAGE

18.3.1 Internal audits shall be conducted monthly by the Quality Assurance Manager. The audits shall cover, as a minimum, the following:

REASON FOR CHANGE

Experience has shown that a monthly internal audit is too high a frequency. It is felt that the wording should be changed as follows.

PROPOSED LANGUAGE

18.3.1 Internal audits shall be conducted quarterly by the Quality Assurance Manager. Whenever audits result in no findings the internal audit may be extended to semi-annually. The audits shall cover as a minimum the following:

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Section Number 19 Paragraph Number(s) 19.4.3

PRESENT LANGUAGE

None.

REASON FOR CHANGE

To comply with NUREG-75-087 Standard Review Plan.

PROPOSED LANGUAGE

19.4.3 Whenever any revisions or modifications are made which are more than editorial changes the NRC will be notified of these changes in accordance with NUREG-75-087 Standard Review Plan and provisions will be made for the review and acceptance of the revisions.



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Section Number Exhibits Paragraph Number(s) Exhibit #1

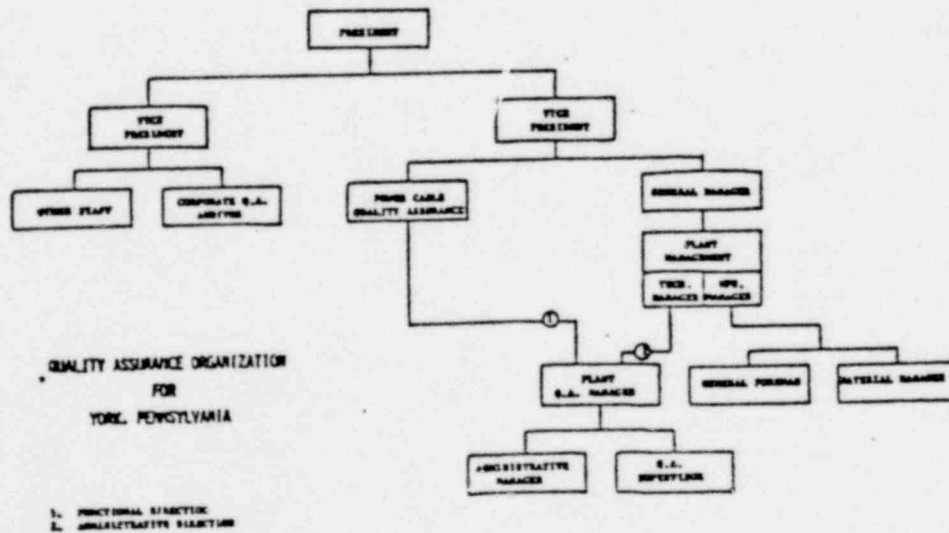
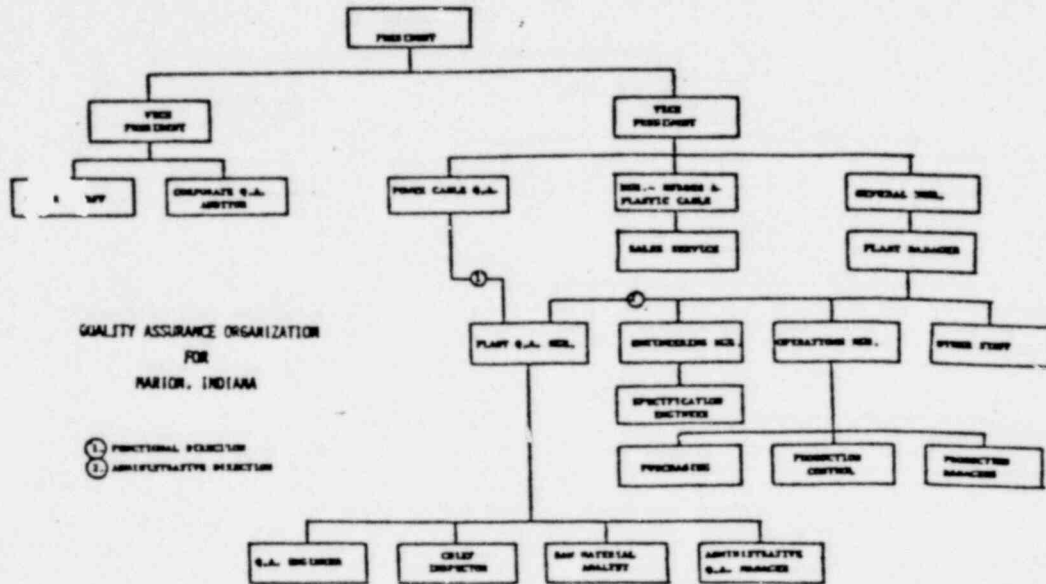
REASON FOR CHANGE

Due to various changes in titles and due to the difference in organizations at Marion and York Exhibit #1 is being changed to reflect what is in actual effect at these two (2) locations. (See proposed Exhibit #1 on page 2)

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POOR ORIGINAL

Section Number \_\_\_\_\_ Exhibits \_\_\_\_\_ Paragraph Number(s) \_\_\_\_\_ Exhibit #1 \_\_\_\_\_



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Section Number Exhibits

Paragraph Number(s) Exhibit #14

REASON FOR CHANGE

There are some obvious errors in the assignment of frequencies for calibration. Spark which are not within the Q.A. Department will be dropped from the Quality Assurance frequency. Pressure and Vacuum Gages will also be added to the Process frequencies. The columns will be retitled "Quality Assurance Equipment Frequency" and "Process Equipment Frequency". (See Proposed Exhibit #14 on page 2)

REASON FOR CHANGE

PROPOSED LANGUAGE

Section Number \_\_\_\_\_ Exhibits \_\_\_\_\_ Paragraph Number(s) \_\_\_\_\_ Exhibit #14 \_\_\_\_\_

EXHIBIT 14

Table I

Secondary Calibration of Test Equipment and Process Instrumentation in the Manufacturing Plants and Quality Assurance Departments

<u>Type of Equipment</u>	<u>Quality Assurance Equipment Frequency</u>	<u>Process Equipment Frequency</u>
1. Micrometer	M	Q
2. Dimensional Gages	M	Q
3. Tensile Gages	S	-
4. Pressure and Vacuum Gages	Q	Q
5. Thermometers	Q	-
6. Temperature Recorders & Controllers	Q	Q
7. Scales and Balances	M	Q
8. Bridges	Q	-
9. Megohmmeters	Q	-
10. Footage Indicators	-	M*
11. Spark Testers		
Calibrate	-	M
Operation	-	D
12. Speed Measuring Devices	-	Q

\*Required only on those equipments that are critical to shipping or manufacturing as defined by the Quality Assurance Department.

D = Daily

Q = Quarterly

A = Annually

M = Monthly

S = Semi-annually