QUALITY ASSURANCE

FOR

AISC

NUCLEAR

QUALITY CERTIFICATION PROGRAM

JULY, 1980

Charles Peshek, Jr.
Director Quality Certification
American Institute of Steel Construction
(312) 670-2400

American Institute of Steel Constr.
Wrigley Building
400 North Michigan Avenue
Chicago, Illinois 60611
8th Floor

UNITED STATES
NUCLEAR REGULATORY COMMISSION
WASHINGTON, D. C. 20555

AUG 12 1980

Mr. Charles Peshek, Jr.
Director, Quality Certification
American Institute of Steel
Construction, Inc.
400 North Michigan Avenue
Chicago, IL 60611

Dear Mr. Peshek:

SUBJECT: NRC ACCEPTANCE OF AISC TOPICAL REPORT (FCTPN-78)

We have evaluated your revised topical report, "Quality Assurance for AISC Nuclear Quality Certification Program," submitted with your letter of May 3, 1979 and revised by your letter of December 4, 1979. The topical report describes the quality assurance program established for the nuclear act ities of the American Institute of Steel Construction, Inc. (AISC) and for the inspection-evaluation activities of its contractor, ABS Worldwide Technical Services, Inc. (ABSTECH). These activities involve 1) the inspection-evaluation of quality assurance programs for structural steel fabricating plants and 2) the issuance of a register identifying such plants that have a quality assurance program meeting the requirements of Appendix B to Title 10 Code of Federal Regulations Part 50. These activities are performed to reduce or eliminate redundant source evaluation surveys of structural steel fabricating plants by purchasing organizations.

We have reviewed your topical report which includes information requested in our letter of November 7, 1978 and discussed at our meetings of June 26, 1978, August 30, 1978, January 4, 1979, April 11, 1979, April 10, 1980, and July 10, 1980 and find that it is responsive to the NRC concerns, describes a quality assurance program that meets the applicable criteria of Appendix B to 10 CFR Part 50, and is therefore acceptable. This letter authorizes the use of the AISC Nuclear Quality Certification Program for the activities as described above and in the introduction to the topical report. It should be noted that this approval does not relieve the purchaser of his responsibility to provide in-process and final inspections of the purchased product.

The AISC Nuclear Quality Certification Program described in the topical report will be subject to inspection by the NRC's Office of Inspection and Enforcement. Any noncompliance or unresolved items identified during NRC inspections will require agreed-upon resolution for the system to remain acceptable. Also, should regulatory criteria or regulations change such that our conclusions about this topical report are invalidated, we will notify you. You will be given the opportunity to revise and resubmit it should you so desire. Finally, programmatic changes by AISC or ABSTECH to this topical report are to be submitted to

NRC for review prior to implementation, and organizational changes are to be submitted no later than 30 days after announcement.

Please enclose a copy of this letter in each report, date the report July 1980, and provide 40 copies to the NRC.

Should you have any questions regarding our review or if we can provide assistance, please contact Mr. Jack Spraul on (301) 492-7741.

Sincerely,

Walter P. Haass

Walter P. Haass, Chief
Quality Assurance Branch
Division of Engineering

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SECTION I

INTRODUCTION

This report describes the American Institute of Steel Construction, Inc. (AISC) Quality Certification Program, the Nuclear Supplement to this program, and the organization and quality related activities of the AISC and its principal contractor, ABS Worldwide Technical Services, Inc. (ABSTECH). The AISC Quality Certification Department was formed in September 1975, by industry initiative, to reduce or eliminate redundant source evaluation surveys of fabricators of structural steel. In 1978 the activities were expanded to include structural steel for nuclear safety-related structures.

ABSTECH, under contract to AISC, inspects-evaluates structural steel fabricating plants in accordance with standard check lists using qualified auditors. Results of these inspections-evaluations are submitted to the AISC. Quarterly, the AISC publishes the AISC Register which lists structural steel fabricating plants that have the personnel, organization, experience, procedures, knowledge, equipment, capability, and commitment to fabricate structural steel of the required quality for a given category of work. The register also identifies structural steel fabricating plants with a nuclear quality assurance program which meets the criteria of the Nuclear Supplement to the AISC Quality Certification Program and Appendix B to 10CFR Part 50. Thus, the AISC Register should reduce the number of source evaluation surveys of fabricators of structural steel. The AISC Register does not, however, relieve the purchaser of his responsibility for providing any required in-process inspection to determine that a particular item is fabricated to purchase order requirements or for determining the acceptability of the final product.

Electrical utilities, nuclear power plant owners and designers, and other interested parties can obtain copies of the AISC Register by writing the AISC Quality Certification Administrator, AISC Headquarters, 1221 Avenue of Americas, New York, New YOrk 10020.

AISC and ABSTECH activities related to the Nuclear Supplement to the AISC Quality Certification Program are controlled by the requirements identified by the word "shall" in this report, and these activities are subject to inspection by the Nuclear Regulatory Commission. The activities of AISC and ABSTECH are described in this report in relation to the following eight applicable criteria of Appendix B to 10 CFR Part 50:

I.	Organization
II.	Quality Assurance Program
V.	Instructions, Procedures, and Drawings
VI.	Document Control
XV.	Nonconformances (Services only)
XVI.	Corrective Action
XVII.	Quality Assurance Records
XVIII.	Audits

The remaining criteria of 10 CFR Part 50, Appendix B do not apply to AISC or ABSTECH and are not addressed here. However, the structural steel fabricators are inspected-evaluated by ABSTECH to the pertinent provisions of 16 of the 18 criteria of Appendix B to 10 CFR Part 50 as indicated in Appendix C. Criterion III, "Design", and Criterion XI, "Test Control", are deleted as not applicable to the structural steel fabricating industry. Regarding Criterion III, "Design", this function is performed by either the owner or structural engineer. The structural

steel fabricator uses the design drawings and prepares shop detail drawings from which the structural steel is fabricated. Regarding criterion XI, "Test Control", this function is outside the scope of the structural steel fabricators' work. The structural steel fabrication does not include performance tests of the structure during operation or any tests to demonstrate satisfactory performance of the structure. The structural steel fabricator supplies a steel structure, the design and performance of which is determined by either the owner and or the structural engineer.

SECTION II

CRITERION I - ORGANIZATION

A. AMERICAN INSTITUTE OF STEEL CONSTRUCTION, INC. (AISC)

AISC is a trade association of structural steel fabricators in the United States. It is a non-profit association dedicated to furthering the advancement of steel construction and to reducing the cost of procuring quality steel fabrication. It is responsible for the Nuclear Quality Certification Program. It is governed by an unpaid board of directors and officers elected by the membership. It functions under a set of duly adopted by laws. It is managed by a President who is a full time employee. The AISC Director Quality Certification is also a full time employee of AISC. The AISC organization chart for Quality Certification is attached as Figure I.

1. Membership

The AISC quality certification program is open to all structural steel fabricators - whether they are members of AISC or not. Therefore membership in AISC has no effect upon participation in the program.

2. Board of Directors

All affairs of AISC are managed by a board of directors which consists of thirty members who are elected by the membership. The board of directors then elects officers which serve for a term of one year. The various committees are appointed by the Chairman of the Board.

3. Chairman of the Board

The chairman is elected by the Board of Directors and presides over all board meetings.

4. President

The President, a full time employee of AISC, is appointed by the board of directors and reports to the Chairman of the Board and the board of directors. He manages all the business affairs of AISC.

5. Vice President Engineering

The Vice President Engineering acts as the day by day supervisor of the Director Quality Certification in addition to other duties. The Vice President Engineering is appointed by and reports to the President.

6. Director Quality Certification

The Director Quality Certification, a full time employee of AISC, is the overall manager of the AISC Quality Certification Program. His duties include scheduling of inspection-evaluations, record keeping, review of all ABSTECH reports on certified and non-certified plants, coordination with the ABSTECH Project Manager, audits of the ABSTECH Project Manager, Lead Auditors and Auditors.

The Director of Quality Certification shall have the following qualifications:

(a) Fabrication Experience - Minimum of three years experience in the following positions.
Structural steel detailer
Structural steel estimating
Shop supervision

(b) Engineering degree from an accredited University and or a registered Professional Engineer.

(c) Knowledge of quality assurance and quality control of structural steel fabrication for the nuclear industry.

(d) Administrative and management ability

(e) Possess abilities to fulfill the described duties.

7. Board Committee On Quality Certification

The members of this committee shall be individuals with knowledge of Quality Certification. This committee, under a Chairman appointed by the Chairman of the Board, shall develop certification policy and recommend that policy to the Board of Directors for their approval. It also assesses the effectiveness of the program. The committee will be composed of twelve members as follows:

(a) Nine members of the Board of Directors - appointed by the Chairman of the Board.

(b) The Director of Quality Certification

(c) Chairman of the Task Nuclear Quality Certification appointed by the Chairman of the Board.

(d) Chairman of the Task Committee Non-Nuclear Quality Certification - Appointed by the Chairman of the Board

8. Task Committee Nuclear Quality Certification

The members of this committee, under a chairman appointed by the Chairman of the Board, develops the criteria for Nuclear Quality Certification, Application Instructions, Program Description, Topical Report and Operating Procedures.

Two members of the committee, appointed by the Chairman, shall audit the Director Quality Certification annually for compliance with operating procedures and this report.

The committee is composed by nine members as follows:

(a) Eight representatives of member companies - appointed by the Chairman of the Board.

(b) Director Quality Certification

9. Task Committee Non-Nuclear Quality Certification

The members of this committee, under a chairman appointed by the Chairman of the Board, develops the criteria for Non-Nuclear Quality Certification, Application Instructions, Program Descriptions and Operating Procedures.

The committee is composed of eight members as follows:

(a) Seven representatives of member companies - appointed by the Chairman of the Board.

(b) Director Quality Certification.

B. ABS Worldwide Technical Services, Inc. (ABSTECH)

AISC has entered into a contract with ABSTECH to perform the inspection-evaluation of plants under the AISC Quality Certification Program in accordance with standard check lists provided by AISC.

ABSTECH provides high quality third party services that assure compliance with established standards.

ABSTECH is a subsidiary company of the American Bureau of Shipping, which is a non-profit ship classification society serving the maritime industry.

ABSTECH is managed by a President and Executive Vice President The ABSTECH organizational chart for AISC Quality Certification is attached as Figure I.

1. President

The President is also President of the American Bureau of Shipping. Operating duties are delegated to the Executive Vice President.

2. Executive Vice President

The Executive Vice President is the Chief operating officer of the company.

3. Assistant Vice President Operations

The Assistant Vice President Operations reports to the Executive Vice President and is responsible for all field activities.

4. Quality Assurance Manager

The Quality Assurance Manager is responsible for monitoring ABSTECH's internal quality assurance program.

5. Project Manager

The ABSTECH project manager has overall management of the program for ABSTECH. When an application is received from the AISC Director Quality Certification he shall establish an audit team composed of a lead auditor and one auditor. He shall review all reports and submit copies and recommendations to the AISC Director Quality Certification.

The Project Manager for Quality Certification shall have the following qualifications:

(a) Knowledge of structural steel fabricating plants such as shop operation, structural detailing and purchasing by on the job training.

(b) Engineering degree from an accredited University and/or a registered Professional Engineer.

(c) Knowledge of quality assurance and quality control of structural steel fabrication for the nuclear industry.

(d) Administrative and management ability.

(e) Possess abilities to fulfill the described duties.

6. Lead Auditor

Lead Auditors shall be individuals who, through a combination of formal and on the job training and experience, are capable of carrying out audits for the AISC Nuclear Supplement to the Quality Certification Program. The Project Manager shall designate Lead Auditors and be responsible for evaluating them.

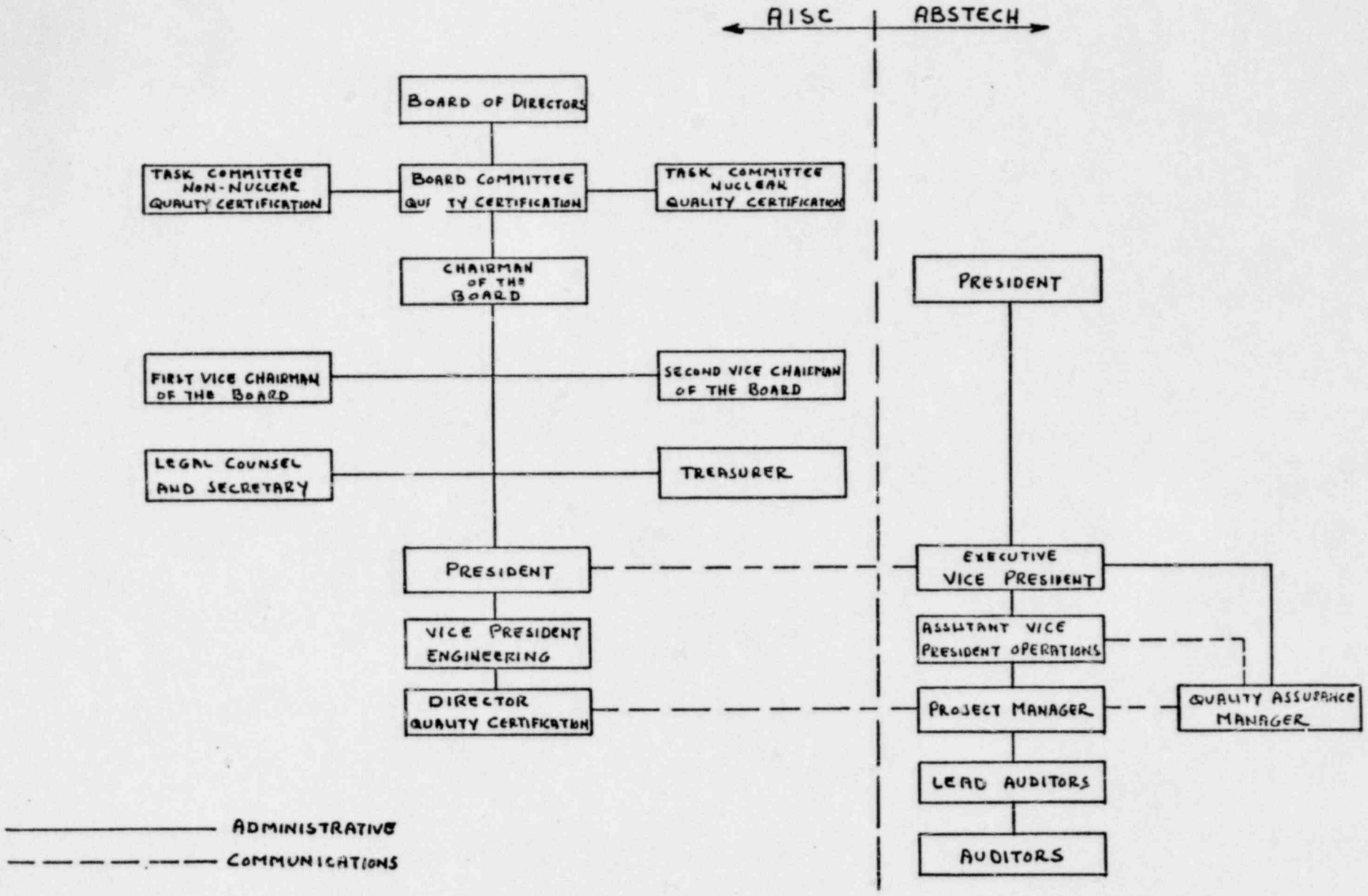
7. Auditors

Auditors shall work under the supervision of a Lead Auditor. They will have ability to advance to a Lead Auditor through in-house training and experience.

C. Interface

The interface between AISC and ABSTECH takes place between the AISC Director Quality Certification and the ABSTECH Project Manager. All information passing between AISC and ABSTECH relating to the Nuclear Quality Certification Program will occur at this level.

ORGANIZATIONAL CHART



SECTION III

CRITERION II - QUALITY ASSURANCE PROGRAM

A. Organizations Participating in the Quality Assurance Program

The organization and general operation of the AISC Quality Certification Department and ABSTECH are described in Section II. The Quality related activities of the AISC Quality Certification Department and ABSTECH shall be controlled by the requirements identified by the word "shall" in this report.

B. Procedural Requirements for Performing Fabricator Evaluations

The AISC Quality Certification Department and ABSTECH shall develop and implement written procedures which comply with this report. These procedures shall establish requirements used in evaluating, documenting and reporting on fabricator quality assurance programs for publications in the AISC Register.

ABSTECH audit teams shall be composed of a Lead Auditor and an Auditor. ABSTECH shall ensure that qualifications of auditor are controlled, maintained, and verified in accordance with their internal procedures.

C. Use of Evaluation Checklists

In evaluating fabricators, ABSTECH audit teams shall use the standardized AISC check list which includes the essential elements required to satisfy quality assurance criteria established by 10CFR 50, Appendix B. The rating procedure and the requirements for certification shall be as established by AISC on the standard check list A copy of the standard check list is included in appendix C to this report.

D. The Inspection Evaluation Cycle

Inspection evaluation of steel fabricators nuclear quality assurance programs shall be performed as follows:

1. Pre-Inspection Evaluation

The audit team shall review the prescribed application material for completeness prior to the plant visit. The prescribed application material includes the fabricator's Quality Assurance Manual and a copy of the Inspection-Evaluation Check List which has the Quality Assurance Manual reference column filled out by the fabricator indicating the page number in the Quality Assurance Manual covering the applicable item. Any required clarification or modification shall be completed by the fabricator prior to the plant visit. Certification in either Category I or Category II is a prerequisite to certification under the Nuclear Supplement.

2. In-Plant Inspection Evaluation

The audit team shall visit the plant, conduct interviews with key supervisory and subordinate employees, and observe and rate the organization in operations affecting quality as prescribed in the standard check list.

3. Exit-Interview

The audit team shall conduct an exit interview with plant management, discussing any deficiences and omission.

4. Auditor's Recommendations

ABSTECH will then submit a written report to the AISC Director Quality Certification and to plant management providing the recommendation regarding certification.

5. AISC Certification

When ABSTECH recommends certification in accordance with the established guidelines, AISC shall then issue a certificate valid for a three year period. The plant shall be subjected to an unannounced audit by an ABSTECH auditor at the beginning of the second and third years, to assure that functions affecting quality are still being performed in accordance with the Inspection Evaluation Check List. The fabricator shall conduct and submit to the AISC Direcotr Quality Certification a complete self audit, using the standard check list, during the 6th and 18th months following initial certification. This self audit shall be reviewed by AISC's Director Quality Certification and the ABSTECH Project Manager. Failure to comply with the self audit or an unsuccessful unannounced second or third year ABSTECH audit shall result in revocation of the certificate. At the end of three years the cycle shall begin again with an inspection evaluation in accordance with the standard check list.

E. Inspection Evaluation Results

ABSTECH audit teams shall document inspection-evaluation results and recommend certification of a fabricator or any results which deny certification of a fabricator. A copy of the results and recommendations shall be submitted to the ABSTECH project manager and to the AISC Director Quality Certification who shall review the report for accuracy, but he cannot overrule the audit team findings. This report shall be maintained in appropriate record files.

F. Fabricator Approval

The ABSTECH documented results recommending a fabricator for certification shall serve as documented evidence of AISC certification and inclusion in the AISC Register. Continued listing in the AISC Register is dependent upon the prescribed successful unannounced visits, self audit and complete re-evaluation as prescribed for in the program cycle. Failure of any of the above will result in deletion from the next printing of the AISC Register.

G. Training and Qualification of Auditors and Lead Auditors

Qualifications, training, and certification of auditors and lead auditors shall be in accordance with ABSTECH procedures and ANSI N45.2.23.

Qualification, training, and certification records for auditor personnel shall be available to government regulatory agencies and for internal audits.

H. AISC Register

The AISC register shall be prepared quarterly by the AISC Director Quality Certification. It shall include the name and address of all plants that have been inspected, evaluated, and approved for certification.

The register shall be checked for accuracy by the ABSTECH Project Manager. It shall be distributed to AISC member companies and all other interested parties upon request of the AISC Director Quality Certification by the Director.

I. Financing

AISC is a non profit organization. Fabricators requesting certification will pay fees to AISC to cover the cost of program development, survey costs and the costs of administering the program. Non-members of AISC will be charged for copies of the Inspection Evaluation Check List and AISC Register.

J. Effectiveness of Program

The AISC Board Committee on Quality Certification shall assess the scope, status, implementation and effectiveness of the Quality Assurance Program once every calendar year to assure that the program is adequate and complies with 10 CFR 50, Appendix B criteria.

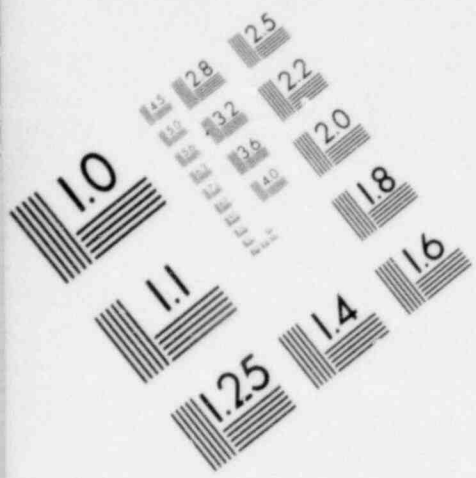
SECTION IV

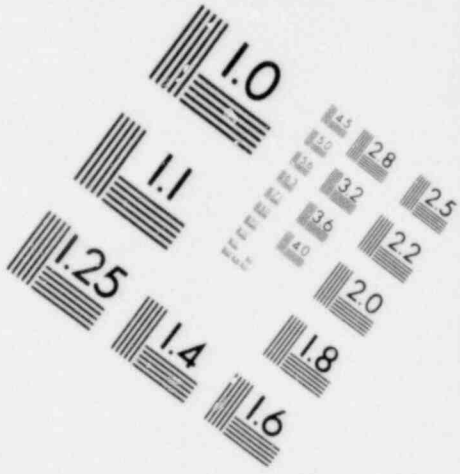
CRITERION V - INSTRUCTIONS AND PROCEDURES

A. General

All procedures affecting the quality - related activities of the AISC Quality Certification Departmen. shall be coordinated with the Task Committee on Nuclear Quality Certification for approval. AISC Quality Certification Department procedures cover such topics as the following:

1. AISC Quality Certification Program Description.
2. AISC Quality Certification Program Application Instructions
3. Inspection Evaluation Check List Category I
4. Inspection Evaluation Report Category I
5. Inspection Evaluation Check List Category II
6. Inspection Evaluation Report Category II
7. Supplement For Nuclear Power Plant Description
8. Supplement for Nuclear Power Plants Application Instructions
9. Inspection Evaluation Check List Nuclear Power Plants
10. Inspection Evaluation Report for Nuclear Power Plant Supplement.





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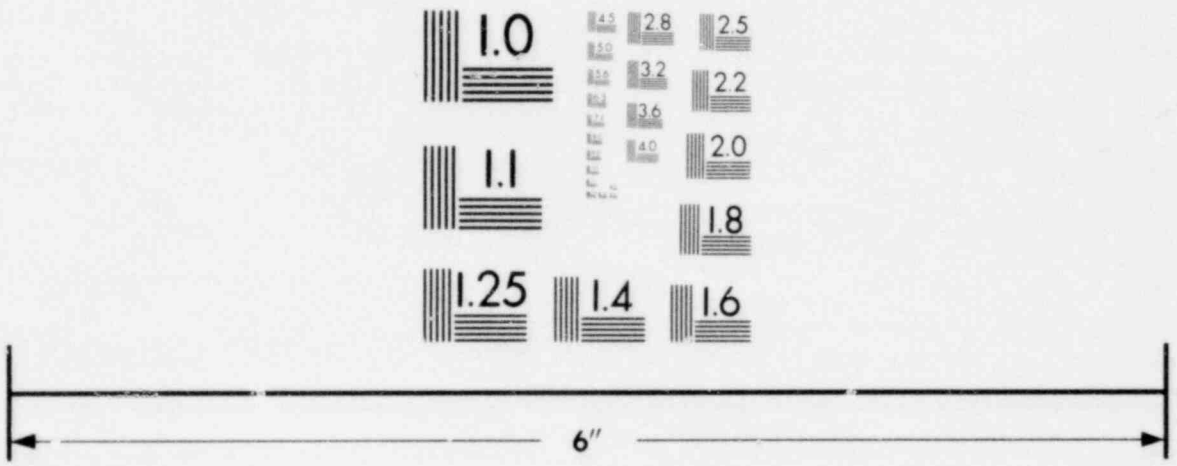

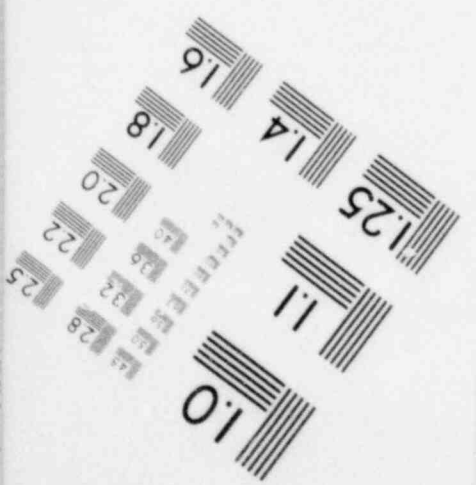

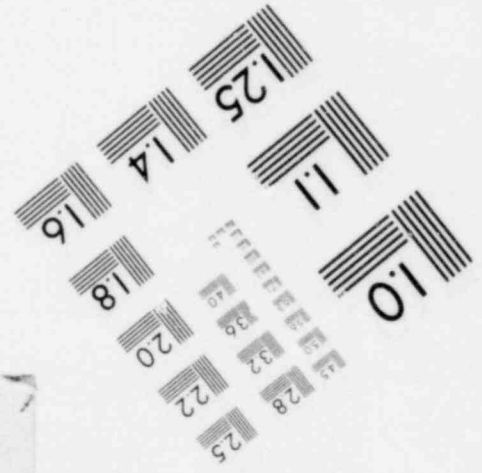

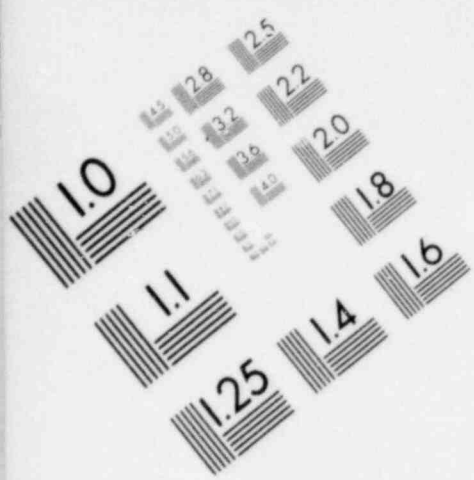

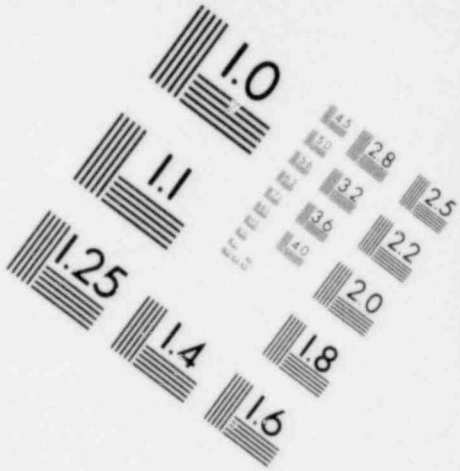

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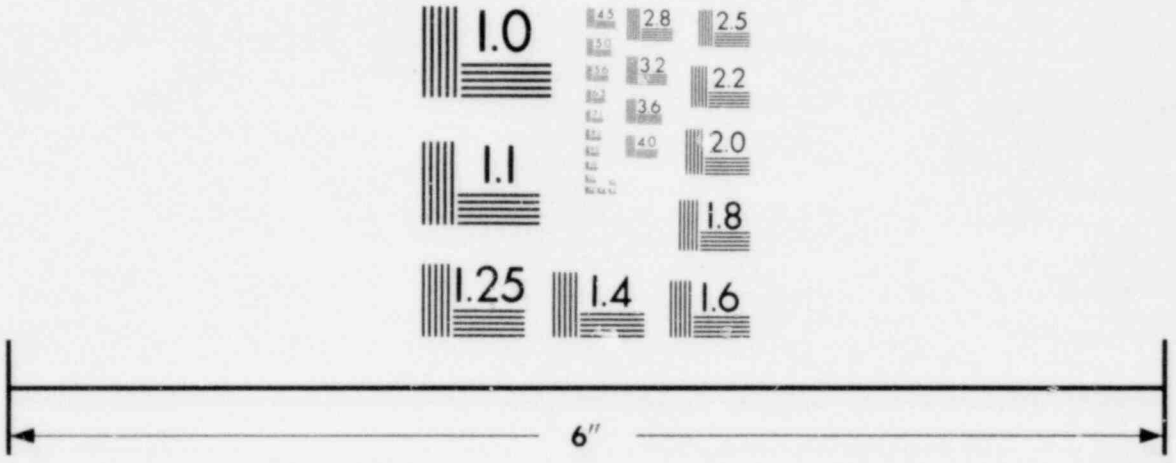

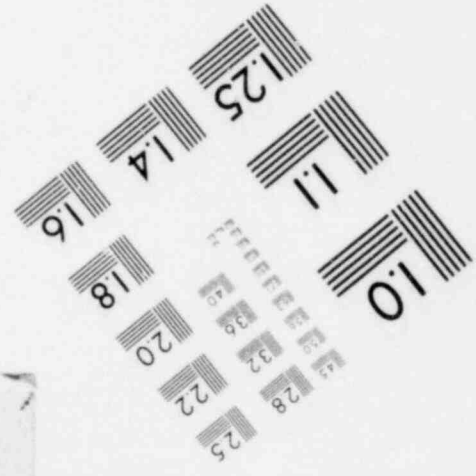

B. Procedures, Preparation, Processing, and Review

Task Committee Nuclear Quality Certification shall:

1. Draft and revise procedures as needed.

2. Review procedures and revisions to ensure that they are consistent with requirements of this Topical Report and that applicable criteria of 10 CFR 50, Appendix B, are addressed.

3. Ensure that procedures and revisions are presented to the Board Committee on Quality Certification for acceptance action.

4. Present to the Director Quality Certification all procedures and revisions accepted by the Board Committee on Quality Certification.

5. Maintain records on procedures and revisions submitted for processing and review.

SECTION V

CRITERION VI - DOCUMENT CONTROL

A. Program Report Distribution and Control

Controlled copies of this report shall be issued to the Chairman of AISC Board Committee on Quality Certification, to the Chairman Task Committee Nuclear Quality Certification, to the ABSTECH Project Manager, and to the AISC Director Quality Certification. Other controlled copies may be issued at the discretion of the AISC Director Quality Certification as requested, uncontrolled copies will be issued to AISC member companies and any other interested parties. Programmatic changes to this report shall be submitted for Nuclear Regulatory Commission review before implementation of the change. Organizational changes shall be reported to the Nuclear Regulatory Commission within thirty days of the change.

B. Procedure Distribution and Control

Copies of AISC Nuclear Certification procedures shall be maintained by AISC and ABSTECH. Copies will be available upon request by any interested party. A master list of current revisions shall be maintained by AISC and ABSTECH. A master list of superseded documents shall be maintained by AISC and ABSTECH.

The Board Committee on Quality Certification and the Board of Directors shall approve the procedures and any changes thereto. This approval shall be signified by the Committee Chairman's signature on these procedures.

C. AISC Register Distribution

The AISC Register, dated to indicate the latest revision, shall be distributed quarterly by the Director AISC Quality Certification to all member companies. The AISC Register is available to non-members on a subscription basis.

D. AISC Contract with ABSTECH

The contract between AISC and ABSTECH fully identifies the duties of both parties, the requirements of ABSTECH, the applicable documents to be followed and the right of review of ABSTECH by AISC.

SECTION VI

CRITERION XV - NONCONFORMANCES

Corrective action required of ABSTECH because of nonconformances discovered by the AISC Director Quality Certification during an audit or at any other time shall be reviewed by the AISC Director Quality Certification. A written report shall be made by the AISC Director Quality Certification stating the required corrective action. ABSTECH shall document the corrective action taken.

Program nonconformance shall be documented and corrected in accordance with the Corrective Action section of this report.

SECTION VII

CRITERION XVI - CORRECTIVE ACTION

A. AISC

1. Board Committee on Quality Certification

The Board Committee on Quality Certification shall evaluate any unsatisfactory conditions discovered by audit of the Director Quality Certification, or by any other means, and determine the need for corrective action. A review shall be made of corrective action proposed to preclude recurrence of an adverse condition. The committee shall also conduct a follow-up review to verify implementation of corrective action and to close out the corrective action documentation.

B. ABSTECH

1. AISC Director Quality Certification

The AISC Director Quality Certification shall evaluate any unsatisfactory conditions discovered by audit of ABSTECH, or by any other means, and determine the need for corrective action. A review shall be made of corrective action proposed to preclude recurrence of an adverse condition. He shall also conduct a follow-up review to verify implementation of corrective action and to close out the corrective action documentation.

C. STRUCTURAL STEEL FABRICATORS

1. ABSTECH Inspection-Evaluation Team

The ABSTECH inspection evaluation team shall evaluate any unsatisfacoty conditions discovered by audit of the fabricator, or by any other means, and determine the need for corrective action. A review shall be made of corrective action proposed to preclude recurrence of an adverse condtion. They shall also conduct a follow-up review to verify implementation of corrective action and to close out corrective action documentation.

SECTION VIII

CRITERION XVII - Q A RECORDS

A. AISC & ABSTECH

1. General

Identifiable and retrievable records shall be maintained to provide objective evidence of compliance with the quality related requirements of this report. These records shall include the following:

1. Program Report
2. Certification Applications and Status
3. Fabricator Survey Results and Checklists
4. Fabricator Annual ABSTECH Audit Reports.
5. Fabricator self-audits reports
6. Internal Audit Reports
7. Quality Certification Operating Procedures
8. Records of Auditor Training, Qualification and certification.

2. Record Indexing, Protection and Storage

All quality related records shall be signed and dated by authorized personnel. To prevent loss or theft, deterioration by extreme environmental conditions, and destruction by fire or flooding, duplicate records shall be maintained, one set in AISC's offices and one set in ABSTECH's offices. Each set shall be kept in file cabinets in enclosed buildings.

3. Responsibility for Record Retention and Maintenance

All quality related records shall be retained by AISC and ABSTECH in accordance with Nuclear Regulatory Commission Regulatory Guide 1.88.

SECTION IX

CRITERION XVIII - AUDITS

A. AISC

I. General

The Director Quality Certification shall annually audit ABSTECH for compliance with the operating procedures and this report. He shall annually audit the ABSTECH Project Manager, Lead Auditors and auditors for with proper training and the following program guidelines:

(a) Review of applications for completeness by the audit team.

(b) Confirmation of application data at the plant.

(c) Proper interviews with supervisory and subordinate employees.

(d) Observation and rating of the organization in operation.

(e) Conduct of the exit interview.

(f) Proper re-audits - if required.

(g) Qualifications of lead auditors and auditors.

The AISC Board Committee on Quality certification shall anually audit the Director Quality Certification for compliance with the operating procedures and this report.

2. External Audits

Audits performed by the Director Quality Certification shall be performed in accordance with written procedures or check lists. Results shall be documented and reviewed with the ABSTECH Project Manager. Corrective action shall be required for any unsatisfactory condition. Audit reports shall be

prepared and a copy sent to the AISC Board Committee on Quality Certification.

3. Internal Audits

Audits performed by the AISC Board Committee on Quality Certification shall be performed in accordance with written procedures or check lists. A copy of the report of each audit shall be maintained in the AISC Files. The audit report shall be reviewed with the Director Quality Certification. Corrective action shall be required for any unsatisfactory condition.

Corrective action required of the Director of Quality Certification shall be reviewed by the AISC Board Committee on Quality Certification.

4. Re-Audits

Verification of corrective action shall be accomplished by re-audit, which may be performed by on-site verification of objective evidence or review of submitted data.

B. ABSTECH

1. General

The Project Manager shall perform an annual audit of auditors and Lead Auditors for compliance with the operating procedures and this report.

2. Internal Audits

Audits performed by the ABSTECH Quality Assurance Manager shall be performed in accordance with written procedures or check lists. Results shall be documented and reviewed with the Project Manager, Lead Auditors, and Auditors. Corrective action shall be required for any unsatisfactory condition. Audit reports shall be prepared and a copy sent to the AISC Director Quality Certification.

Corrective action required of the Project Manager, Auditors or Lead Auditors shall be reviewed by the Quality Assurance Manager.

3. External Audits

Inspection-evaluation and annual audits performed by Lead Auditors or Auditors shall be performed in accordance with written procedures or check lists. Results shall be documented and reviewed with the audited steel fabricator. Corrective action shall be required for any unsatisfactory condition. Audit reports shall be prepared and a copy sent to the Project Manager.

4. Re-Audits

Verification of corrective action shall be accomplished by re-audit, which may be performed by on-site verification of objective evidence or review of submitted data.

AISC REGISTER

OF

CERTIFIED STRUCTURAL STEEL FABRICATORS

-DATE-

Published by

American Institute of Steel Construction, Inc.

Wrigley Building

400 North Michigan Avenue

Chicago, Illinois 60611

8th Floor

HOW TO USE THE AISC REGISTER

The AISC Register lists the company name, plant location, category of certification, and if certified, under the Nuclear Supplement.

The AISC Register is published as a service to the Construction and Nuclear Industry. The goal is to assit in the economic evaluation of structural steel fabricators for the fabrication of structural steel for non-nuclear and nuclear safety-related structures. Information contained in the following pages has been developed by the publisher and is intended as a central source of information.

This Register will be revised and re-published totally or in part at quarterly intervals to keep the list current. Revisions to the listing will contain additions or deletions as recommendations to specific requirements for certification are met.

COMPANY	PLANT LOCATION	DATE OF CERTIFICATION	CERTIFICATION CATEGORY	NUCLEAR SUPPLEMENT	NUCLEAR SUPPLEMENT DATE

A P P E N D I X - A

AMERICAN INSTITUTE OF STEEL CONSTRUCTION

QUALITY CERTIFICATION INSPECTION - EVALUATION CHECK LIST

CATEGORY I SIMPLE STEEL STRUCTURES

Typical structures in this category may include but are not necessarily limited to the following:

Small public service and institutional buildings such as schools, etc.

Low rise, truss/beam/column.

Shopping centers

Light manufacturing

Stairs and platforms

Ornamental

Warehouses

Simple rolled beam bridges

Sign structures

Plant _____

Inspector _____

Date _____

CATEGORY: I

INSPECTION - EVALUATION CHECK LIST

Rating Procedure

Each item on the Inspection-Evaluation Check List will be rated from 0 to 4 or indicated "NA" on the following basis:

(0) Unsatisfactory: No effective compliance
(1) Poor: Less than minimum requirements
(2) Satisfactory: Complies with minimum requirements
(3) Good: Above minimum requirements
(4) Outstanding: Superior to others
(NA) Not Applicable: Certain items on the Inspection-Evaluation Check List may not be appropriate for the plant being certified, and should not be rated. These items will not be considered "rated items" in computing Summary Ratings.

NOTE: The Inspection-Evaluator may, at his discretion, mark an item on the Inspection-Evaluation Check List NA even though it may not be so noted, providing, a complete explanation is given for doing so. This may include items marked essential.

Minimum Ratings Required for Certification

1. Overall Rating of Total Operation* 2.5

2. Summary Ratings of Quality Assurance Functions (General Management, Engineering & Drafting, Procurement, Operations, Quality Control)* 2.0

3. Ratings of Essential Items (indicated on check list by CAPITAL LETTERS) 2.0

4. Rating of Items Other than Essential Items ..... NO MINIMUM

* The detailed methods for computing these Ratings are included with the Inspection-Evaluation Report sent to each applicant for Certification.

CATEGORY: I	INSPECTION-EVALUATION CHECK LIST	Rating	Explanation

A. GENERAL MANAGEMENT

1. Policy Statement

a.	DOES THIS STATEMENT AFFIRM THAT THE COMPANY POLICY IS TO DIRECT ALL ACTIVITIES OF THE ORGANIZATION IN SUCH A MANNER THAT THE FABRICATED PRODUCT MEETS THE QUALITY REQUIREMENTS SPECIFIED IN THE CONTRACT DOCUMENTS?	0 1 2 3 4	_____

2. Organization and Personnel

a.	Does the organization chart clearly show lines of plant management authority and lines of responsibility down to principal plant department supervisors?	0 1 2 3 4	_____
b.	Adequacy of job descriptions.	0 1 2 3 4	_____
c.	Qualification of assigned personnel for key positions.	0 1 2 3 4	_____

3. Procedures

a.	EFFECTIVENESS OF PLANT MANAGEMENT REVIEW OF ASSIGNED WORK TO DETERMINE QUALITY REQUIREMENTS.	0 1 2 3 4	_____
b.	EFFECTIVENESS OF PROCEDURE FOR DISTRIBUTION OF SPECIAL QUALITY REQUIREMENTS TO PLANT DEPARTMENTS.	0 1 2 3 4	_____
c.	Effectiveness of review procedures for fabrication and erection prior to start of fabrication.	0 1 2 3 4	_____

Plant _____ Inspector _____ Date _____

CATEGORY: I	INSPECTION-EVALUATION CHECK LIST	Rating	Explanation

A. GENERAL MANAGEMENT (continued)

4. Facilities and Equipment

a. Does Management have an adequate and current inventory of fabrication equipment in the plant? 0 1 2 3 4 _____

5. Record

Does the fabricator have verification and evaluation of his records of work which demonstrates the effect of his quality assurance program? 0 1 2 3 4 _____

Plant _____ Inspector _____ Date _____

CATEGORY: I INSPECTION - EVALUATION CHECK LIST Rating Explanation

B. ENGINEERING AND DRAFTING

1. Policy Statement

a. Does this policy affirm the company will provide shop detail drawings and instructions which adequately interpret the owner's designs and specifications and which are approved by the owner? 0 1 2 3 4 _____

2. Organization & Personnel

If there is an organized in-house Drafting Department, the following questions are to be evaluated. (a thru h) (May be NA)

a. IS THERE IN-HOUSE DRAFTING CAPABILITY WITH DRAFTSMEN AND CHIEF DRAFTSMAN WHO IS AN ENGINEERING TECHNICIAN (SOME TRADE SCHOOL OR COLLEGE TRAINING AND/OR EXPERIENCE) OR C.E. OR REGISTERED P.E.? 0 1 2 3 4 _____

b. Is the Drafting Department formally organized and does it include an organization chart with written responsibilites for each position? 0 1 2 3 4 _____

c. Are the lines of authority and responsibility for the Drafting Department clearly shown with respect to other departments? 0 1 2 3 4 _____

d. Adequacy of the Chief Draftsman's knowledge of applicable codes and specifications. 0 1 2 3 4 _____

e. Adequacy of provisions and personnel to list, specify, and define material requirement definitions. 0 1 2 3 4 _____

f. Do these people have adequate knowledge of the applicable material specifications? 0 1 2 3 4 _____

g. Do these people have adequate knowledge of mill rolling practices as they affect structural steel detailing? 0 1 2 3 4 _____

h. Is there an adequate drafting squad including an experienced Squad Foreman? 0 1 2 3 4 _____

i. Adequacy of personnel available to provide technical answers to other departments. 0 1 2 3 4 _____

Plant _____ Inspector _____ Date _____

CATEGORY: I INSPECTION-EVALUATION CHECK LIST Rating Explanation

B. ENGINEERING AND DRAFTING (cont'd)

2. Organization & Personnel (cont'd)

If detail drawings are sublet, the following questions are to be evaluated. (j thru o) (May be NA)

j. ARE SHOP DETAILS SUBLET TO A QUALIFIED STRUCTURAL DRAFTING FIRM WHO HAS A CHIEF DRAFTSMAN WHO IS AN ENGINEERING TECHNICIAN (SOME TRADE SCHOOL OR COLLEGE TRAINING AND/OR EXPERIENCE) OR C.E. OR REGISTERED P.E.? 0 1 2 3 4 _____

k. IS THERE AN IN-HOUSE PERSON CAPABLE OF SUPERVISING, EVALUATING AND COORDINATING OUTSIDE SHOP DETAIL DRAWINGS? 0 1 2 3 4 _____

ℓ. Does this person transmit standards and assure adequate compliance by the sublet detailer? 0 1 2 3 4 _____

m. Does this person have adequate knowledge of applicable code and specifications? 0 1 2 3 4 _____

n. Does this person have adequate knowledge of the applicable material specifications? 0 1 2 3 4 _____

o. Does this person have adequate knowledge of mill rolling tolerances as they affect structural steel detailing? 0 1 2 3 4 _____

If there is an organized in-house Design Engineering Department, the following questions are to be evaluated. (p thru t) (May be NA)

p. Is the Engineering Department formally organized and does it include an organization chart with written responsibilities for each position? 0 1 2 3 4 _____

q. Are the lines of authority and responsibility for the Engineering Department clearly shown with respect to other departments? 0 1 2 3 4 _____

r. Is there a person capable of supervising in-house design or evaluating and coordinating outside design? 0 1 2 3 4 _____

s. Does this person have adequate knowledge of applicable codes and specifications? 0 1 2 3 4 _____

t. Does the company have adequate in-house design engineers or does it consistently use consultants qualified by registration or experience? 0 1 2 3 4 _____

Plant _____ Inspector _____ Date _____

CATEGORY: I	INSPECTION - EVALUATION CHECK LIST	Rating	Explanation

B. ENGINEERING AND DRAFTING (continued)

3. Procedures

a.	DOES THE DRAFTING DEPARTMENT MAINTAIN A CURRENT LOG OF DESIGN DRAWINGS AND SPECIFICATION RECEIPTS WITH LATEST REVISIONS AND DISPOSITIONS?	0 1 2 3 4	
b.	DETAIL DRAWINGS CHECKED BY QUALIFIED PERSONNEL.	0 1 2 3 4	
c.	DOES THE DRAFTING DEPARTMENT MAINTAIN A CURRENT LOG OF SHOP DETAIL DRAWINGS WITH LATEST APPROVAL, REVISIONS AND DISPOSITIONS?	0 1 2 3 4	
d.	ARE COPIES OF APPROVED SPECIAL PROCEDURES, IN ADDITION TO WELDING, FURNISHED TO QUALITY CONTROL AND PRODUCTION SUPERVISORS?	0 1 2 3 4	
e.	Current log of special process instructions with latest approval, revisions, dissemination and control.	0 1 2 3 4	
f.	Changes to drawings and documents reviewed and approved by those who originated the documents.	0 1 2 3 4	
g.	Provisions to assure that obsolete drawings and documents are destroyed or isolated from use.	0 1 2 3 4	
h.	Adequacy of established drafting standards and are there procedures to assure compliance both in house and on sublet work.	0 1 2 3 4	
i.	DRAFTING PROCEDURES TO ESTABLISH IDENTITY OF MAIN MATERIAL IN FINAL STRUCTURE SO THAT IT CAN BE TRACED TO MATERIAL REQUISITIONS AND MILL TEST REPORTS AND ARE PROCEDURES USED TO ASSURE COMPLIANCE BOTH IN HOUSE AND ON SUBLET-DRAFTING WORK?	0 1 2 3 4	

Plant_____ Inspector_____ Date_____

CATEGORY: I — INSPECTION-EVALUATION CHECK LIST	Rating	Explanation

B. ENGINEERING AND DRAFTING (continued)

3. Procedures (continued)

j. Procedure for control, distribution and revision of job specifications to shop force and quality control. 0 1 2 3 4 _____

k. Procedure for coordinating drafting procedures with field erection requirements. 0 1 2 3 4 _____

ℓ. Effectiveness of written procedure for control, issue, revision of approved shop detail 0 1 2 3 4 _____

4. Facilities and Equipment

a. CURRENT REFERENCE LIBRARY OF SPECIFICATIONS INCLUDING:

AWS
ASTM
AISC
- Quality Criteria
- Guide to Shop Painting
- Steel Construction Manual
- Structural Steel Detailing

SSPC
APPLICABLE STATE D.O.T.
AASHTO
AREA
} Applicable to Bridge Work Only

0 1 2 3 4 _____

b. Legible shop prints provided. 0 1 2 3 4 _____

Plant _____ Inspector _____ Date _____

CATEGORY: I	INSPECTION-EVALUATION CHECK LIST	Rating	Explanation

C. PROCUREMENT

1. Policy Statement

Does this statement affirm the Company policy to obtain material and services in conformance with contract documents and specifications? 0 1 2 3 4 _____

2. Organization and Personnel

Material ordering personnel specifically trained for purchasing of materials. 0 1 2 3 4 _____

3. Procedures

a. MATERIAL ORDERED TO A PARTICULAR SPECIFICATION. 0 1 2 3 4 _____

b. Fabricated purchased items subject to same Quality Control criteria as in-plant fabricated items. 0 1 2 3 4 _____

c. Where a level of certification is required by contract documents, is sublet fabrication awarded to fabricator holding appropriate certification? 0 1 2 3 4 _____

d. Procurement sources adequately evaluated. 0 1 2 3 4 _____

e. Mill materials inspected upon receipt and marked for permanent identification. 0 1 2 3 4 _____

f. All other purchased materials (bolts, paint, castings, etc.) checked for conformance to purchasing document upon receipt. 0 1 2 3 4 _____

g. Controls set up to insure proper usage of purchase items. 0 1 2 3 4 _____

h. Records maintained and procedures functioning to insure traceability of grade, and where required, heat numbers and material test reports for special requirements. 0 1 2 3 4 _____

i. Manufacturers' test reports of bolts, weld wire, paint, etc., kept on file, if required. 0 1 2 3 4 _____

j. MILL TEST REPORTS KEPT ON FILE. 0 1 2 3 4 _____

4. Equipment and Facilities

File of current ASTM specifications available to Procurement personnel. 0 1 2 3 4 _____

CATEGORY: I	INSPECTION - EVALUATION CHECK LIST	Rating	Explanation

D. OPERATIONS

1. Policy Statement

a. Does this statement affirm Company policy - "To manufacture from approved shop detail drawings and procedures and ship a finished product in accordance with contract documents and specifications"? 0 1 2 3 4 _____

b. Is there an adequate policy for resolving controversy between Operations and Quality Control on nonconforming items. 0 1 2 3 4 _____

2. Organization and Personnel

a. Does organization chart show clearly lines of responsibility and authority? 0 1 2 3 4 _____

b. Job descriptions available and adequate. 0 1 2 3 4 _____

c. Supervisors qualified by experience and/or education. 0 1 2 3 4 _____

d. DOES THE FABRICATOR HAVE A COMPETENT WELDING TECHNICIAN OR SUPERINTENDENT OR AN OUTSIDE EXPERT AVAILABLE ON CALL TO ADVISE ON WELDING PROBLEMS? 0 1 2 3 4 _____

e. Does this person have the authority to control welding procedures in the shop? 0 1 2 3 4 _____

f. WELDERS CERTIFIED PER A.W.S. 0 1 2 3 4 _____

g. DOES THE FABRICATOR HAVE A WELDER IDENTIFICATION SYSTEM? 0 1 2 3 4 _____

h. SHOP SUPERVISION CONVERSANT WITH CURRENT WORKMANSHIP PROVISIONS OF AWS AND AISC SPECIFICATIONS. 0 1 2 3 4 _____

Plant _____ Inspector _____ Date _____

AISC
FC 1.1-75

CATEGORY: I INSPECTION - EVALUATION CHECK LIST Rating Explanation

D. OPERATIONS (cont'd)

3. Procedures

a. Material Receipt and Storage

i. GRADE OF MATERIAL AND MARKING VERIFIED PRIOR TO FABRICATION.	0 1 2 3 4	_____
ii. Raw material blocked and handled to prevent permanent distortion.	0 1 2 3 4	_____
iii. ADEQUATE AND PROPER STORAGE FOR WELDING ELECTRODES, FLUX, BOLTS, RIVETS AND PAINT.	0 1 2 3 4	_____

b. Fabrication

i. Adequacy of procedure for distributing drawings to the shop force.	0 1 2 3 4	_____
ii. Adequacy of procedure for handling revisions and voided drawings.	0 1 2 3 4	_____
iii. ADEQUACY OF PROCEDURE FOR INSTRUCTING THE SUPERVISORS AND WORKMEN ABOUT SPECIFICATIONS, INCLUDING WELDING PROCEDURES AND SPECIAL REQUIREMENTS.	0 1 2 3 4	_____
iv. MATERIAL IDENTIFIED WHEN TRANSFERRED FROM STORAGE TO SHOP PRIOR TO PROCESSING.	0 1 2 3 4	_____
v. IS THIS IDENTITY RETAINED DURING FABRICATION?	0 1 2 3 4	_____
vi. Adequacy of system for assuring proper application of material cut from larger pieces.	0 1 2 3 4	_____
vii. Grade identification retained on material returned to stock.	0 1 2 3 4	_____
viii. Is material inspected for conformance to ASTM-A6 standard?	0 1 2 3 4	_____
ix. WELDING ROD AND WELDING FLUXES ADEQUATELY IDENTIFIED WHEN STORED.	0 1 2 3 4	_____
x. FLUX AND ROD OVENS ADEQUATE AND OPERATING PER AWS LATEST ADOPTION.	0 1 2 3 4	_____

Plant_____ Inspector_____ Date_____

CATEGORY: I — INSPECTION - EVALUATION CHECK LIST — Rating — Explanation

D. OPERATIONS (Continued)

3. Procedures (Continued)

b. Fabrication (continued)

xi.	RECORD OF WELDER QUALIFICATIONS AND WELDER IDENTIFICATION SYSTEM MAINTAINED IN THE SHOP.	0 1 2 3 4	_____
xii.	Welders clean slag and check their welds.	0 1 2 3 4	_____
xiii.	Welders identify welds they make.	0 1 2 3 4	_____
xiv.	Checking of workmanship throughout the process to conform to contract documents and specifications.	0 1 2 3 4	_____
xv.	PROPER BOLT TIGHTENING PROCEDURES USED PER RCRBSJ SPECIFICATIONS.	0 1 2 3 4	_____

c. Clean and Paint

i.	Pre-blasting or post-blasting equipment. (May be NA depending upon type of work)	0 1 2 3 4	_____
ii.	Provisions for control of surface preparation in accordance with SSPC standards. (May be NA depending upon type of work)	0 1 2 3 4	_____
iii.	Provisions for adequate agitation, temperature control and methods of paint application.	0 1 2 3 4	_____
iv.	Provisions for wet and dry film measurement control.	0 1 2 3 4	_____

d. Corrective Action

i.	Procedure for correcting non conforming material or work in process rejected by the Quality Control forces.	0 1 2 3 4	_____
ii.	Does this procedure assure the level of authority is commensurate with the problem?	0 1 2 3 4	_____
iii.	System used to indicate conforming or nonconforming work in progress.	0 1 2 3 4	_____
iv.	Does the procedure include provision for action to avoid future nonconforming work?	0 1 2 3 4	_____

Plant _____ Inspector _____ Date _____

CATEGORY: I — INSPECTION - EVALUATION CHECK LIST	Rating	Explanation
D. OPERATIONS (continued)		
3. Procedures (continued)		
e. Shipping		
i. Provisions for suitable loading, blocking and bracing for shipment.	0 1 2 3 4	
f. Maintenance		
i. EQUIPMENT AND TOOLS PERIODICALLY INSPECTED TO INSURE ACCEPTABLE PERFORMANCE.	0 1 2 3 4	
ii. WELDING MACHINES PERIODICALLY CHECKED TO INSURE CORRECT AMP AND VOLT READINGS.	0 1 2 3 4	
4. Facilities and Equipment for Fabrication		
a. Does fabricator have automatic or semi-automatic equipment for making continuous welds, etc?	0 1 2 3 4	
b. Manual welding equipment in use in acceptable operating condition.	0 1 2 3 4	
c. Does fabricator have mechanically-guided burning equipment?	0 1 2 3 4	
d. Does fabricator have a wheelblast or sandblast equipment? (May be NA)	0 1 2 3 4	
e. Does fabricator have mechanical paint agitators and other painting equipment?	0 1 2 3 4	
f. If fabricator is involved in riveting, metalizing and stud welding, is his equipment adequate? (May be NA depending on type of work)	0 1 2 3 4	
g. Does fabricator have adequate and accurate hole-making equipment? (Punches and Drills)	0 1 2 3 4	
h. Does fabricator have adequate and accurate cutting and finishing equipment? (Shears, saw, milling machine, planer and/or grinder)	0 1 2 3 4	
i. Housekeeping adequate.	0 1 2 3 4	
j. Air supply adequate.	0 1 2 3 4	
k. Electrical supply adequate.	0 1 2 3 4	

Plant _____ Inspector _____ Date _____

AISC
FC 1.1-75

CATEGORY: I	INSPECTION-EVALUATION CHECK LIST	Rating	Explanation

E. QUALITY CONTROL

1. Policy Statement

a. Does this statement affirm that the Company policy is "To provide the inspection and control procedures to assure that the fabricated product is in accordance with contract documents and specifications?" 0 1 2 3 4 _____

2. Organization and Personnel

a. Does the Organization include a qualified Quality Control Supervisor? 0 1 2 3 4 _____

b. Is a qualified testing service available and used if required? 0 1 2 3 4 _____

c. Are there qualified shop inspectors or persons to perform this function? 0 1 2 3 4 _____

d. Does the Organization include at least one qualified in-house Magnetic Particle Inspection Technician? 0 1 2 3 4 _____

3. Procedures

a. ARE CONTRACT SPECIFICATIONS AND SPECIAL PROVISIONS ON FILE? 0 1 2 3 4 _____

b. DOES QUALITY CONTROL HAVE AUTHORITY TO STOP AND RESPONSIBILITY TO INFORM OPERATING SUPERVISION ON NON-CONFORMING WORK? 0 1 2 3 4 _____

Plant _____ Inspector _____ Date _____

CATEGORY: I INSPECTION - EVALUATION CHECK LIST | Rating | Explanation

E. QUALITY CONTROL (continued)

3. Procedures (continued)

c. Is a check made to ensure that approved welding procedures are disseminated and followed in the shop? 0 1 2 3 4 _____

d. Required records maintained: Of Heat Numbers and material test reports for special requirements. 0 1 2 3 4 _____

e. Required records maintained of N.D.T. Reports. 0 1 2 3 4 _____

f. RECORD OF QUALIFIED WELDERS ON FILE. 0 1 2 3 4 _____

g. An adequate in-process inspection procedure. 0 1 2 3 4 _____

h. Adequate procedure for handling nonconforming material. 0 1 2 3 4 _____

i. Adequate procedures for liason with outside inspectors. 0 1 2 3 4 _____

4. Facilities and Equipment

a. A CURRENT LIBRARY OF SPECIFICATIONS, INCLUDING:

AWS
AISC
  Quality Control
  Guide to Shop Painting
ASTM
ASNDT
SSPC

APPLICABLE STATE D.O.T.
AASHTO
AREA
} Applicable to Bridge work only 0 1 2 3 4 _____

Plant_____ Inspector _____ Date_____

CATEGORY: I	INSPECTION-EVALUATION CHECK LIST	Rating	Explanation

E. QUALITY CONTROL (continued)

4. Facilities and Equipment (continued)

b. DO THE INSPECTORS HAVE THE FOLLOWING EQUIPMENT AVAILABLE?

Tapeline Welding Gauges Tag System Paint Gauge	0 1 2 3 4	_____

c. Is the following equipment available?

Magnetic Particle	0 1 2 3 4	_____

Plant _____ Inspector _____ Date _____

INSPECTION - EVALUATION - EXIT INTERVIEW

REPORT OF RATED ITEMS WITH LESS THAN 2 RATING WHICH INDICATES AN OMISSION OR A DEFICIENCY.

THE INSPECTION - EVALUATION TEAM WILL LIST AND EXPLAIN THE REASON FOR ANY RATED ITEM WITH A RATING LESS THAN 2.

	FUNCTION	EXPLANATION
A.	GENERAL MANAGEMENT	
B.	ENGINEERING & DRAFTING	
C.	PROCUREMENT	
D.	OPERATIONS	
E.	QUALITY CONTROL	

Plant _____ Inspector _____ Date _____

AISC
FC 1.2-75

AMERICAN INSTITUTE OF STEEL CONSTRUCTION

QUALITY CERTIFICATION PROGRAM

INSPECTION - EVALUATION REPORT

CATEGORY : I

Check

Initial Certification
Renewal (2nd or 3rd year)
Renewal (1st year of new cycle)

Fabricator: _____

Surveyed By: _____ Date: _____

Street Address: _____ City/State: _____ Zip: _____

Persons Contacted:

Name: 1. _____ 3. _____ 5. _____

Title: _____

Name: 2. _____ 4. _____ 6. _____

Title: _____

Certification recommended

Certification not recommended

If not recommended, indicate reason(s): _____

_____

_____

Signed _____

Date _____

9/19/75

INSPECTION - EVALUATION REPORT

SUMMARY RATING OF GENERAL MANAGEMENT

		Relative % Weight for each Segment		Rating per Segment
A1.	Policy Statement			
	$\frac{\text{total points}}{\text{number of rated items}}$	X 15%	=	_____
A2.	Organization & Personnel			
	$\frac{\text{total points}}{\text{number of rated items}}$	X 30%	=	_____
A3.	Procedures			
	$\frac{\text{total points}}{\text{number of rated items}}$	X 20%	=	_____
A4.	Facilities & Equipment			
	$\frac{\text{total points}}{\text{number of rated items}}$	X 10%	=	_____
A5.	Record			
	$\frac{\text{total points}}{\text{number of rated items}}$	X 25%	=	_____
Summary Rating of General Management:		100%		_____

Check One

Approved

Disapproved

Plant _____ Inspector _____ Date _____

CATEGORY: I

INSPECTION - EVALUATION REPORT

SUMMARY RATING OF ENGINEERING/DRAFTING

		Relative % Weight for each Segment		Rating per Segment
B1.	Policy Statement			
	$\frac{\text{total points}}{\text{number of rated items}}$	X 10%	=	_____
B2.	Organization & Personnel			
	$\frac{\text{total points}}{\text{number of rated items}}$	X 30%	=	_____
B3.	Procedures			
	$\frac{\text{total points}}{\text{number of rated items}}$	X 50%	=	_____
B4.	Facilities & Equipment			
	$\frac{\text{total points}}{\text{number of rated items}}$	X 10%	=	_____
Summary Rating of Engineering/Drafting:		100%		_____

Check One

Approved

Disapproved

Plant _____ Inspector _____ Date _____

CATEGORY: I

INSPECTION-EVALUATION REPORT

SUMMARY RATING OF PROCUREMENT

		Relative % Weight for each Segment		Rating per Segment
C1.	Policy Statement			
	$\frac{\text{total points}}{\text{number of rated items}}$	X 10%	=	_____
C2.	Organization & Personnel			
	$\frac{\text{total points}}{\text{number of rated items}}$	X 30%	=	_____
C3.	Procedures			
	$\frac{\text{total points}}{\text{number of rated items}}$	X 50%	=	_____
C4.	Equipment & Facilities			
	$\frac{\text{total points}}{\text{number of rated items}}$	X 10%	=	_____
Summary Rating of Procurement:		100%		_____

Check One

Approved

Disapproved

Plant _____ Inspector _____ Date _____

CATEGORY: I

INSPECTION - EVALUATION REPORT

SUMMARY RATING OF OPERATIONS

		Relative % Weight for each Segment		Rating per Segment
D1.	Policy Statement			
	$\frac{\text{total points}}{\text{number of rated items}}$	X 10%	=	_____
D2.	Organization & Personnel			
	$\frac{\text{total points}}{\text{number of rated items}}$	X 35%	=	_____
D3.	Procedures			
	$\frac{\text{total points}}{\text{number of rated items}}$	X 40%	=	_____
D4.	Facilities & Equipment			
	$\frac{\text{total points}}{\text{number of rated items}}$	X 15%	=	_____
Summary Rating of Operations		100%		_____

Check One

Approved

Disapproved

Plant _____ Inspector _____ Date _____

CATEGORY: I

INSPECTION - EVALUATION REPORT

SUMMARY RATING OF QUALITY CONTROL

		Relative % Weight for each Segment		Rating per Segment
E1.	Policy Statement			
	$\frac{\text{total points}}{\text{number of rated items}}$	X 5%	=	_____
E2.	Organization & Personnel			
	$\frac{\text{total points}}{\text{number of rated items}}$	X 40%	=	_____
E3.	Procedures			
	$\frac{\text{total points}}{\text{number of rated items}}$	X 50%	=	_____
E4.	Equipment & Facilities			
	$\frac{\text{total points}}{\text{number of rated items}}$	X 5%	=	_____
Summary Rating of Quality Control:		100%		_____

Check One

Approved

Disapproved

Plant _____ Inspector _____ Date _____

CATEGORY: I

INSPECTION - EVALUATION REPORT

OVERALL RATING OF TOTAL OPERATION

FUNCTION		SUMMARY RATING	% WEIGHT	WEIGHTED RATING
A.	General Management		X 10%	
B.	Engineering/Drafting		X 15%	
C.	Procurement		X 10%	
D.	Operations		X 40%	
E.	Quality Control		X 25%	
	Overall Rating of Total Operation		100%	

RATING OF ESSENTIAL ITEMS

ITEM	RATING	ITEM	RATING	ITEM	RATING	ITEM	RATING	ITEM	RATING
A1a		B2a		C3a		D2d		E3a	
A3a		B2j		C3j		D2f		E3b	
A3b		B2k				D2g		E3f	
		B3a				D2h		E4a	
		B3b				D3a i		E4b	
		B3c				D3a iii			
		B3d				D3b iii			
		B3i				D3b iv			
		B4a				D3b v			
						D3b ix			
						D3b x			
						D3b xi			
						D3b xv			
						D3f i			
						D3f ii			

Check One

Approved

Disapproved

Plant _____ Inspector _____ Date _____

A P P E N D I X - B

AMERICAN INSTITUTE OF STEEL CONSTRUCTION

QUALITY CERTIFICATION INSPECTION - EVALUATION CHECK LIST

CATEGORY: II COMPLEX STEEL STRUCTURES

Typical structures in this category may include but are not necessarily limited to the following:

Large public service and institutional buildings

Heavy manufacturing

Power houses (fossil non Q)

Metal producing/rolling facilities

Crane Bridge girders

Bunkers and bins

Stadia, auditoriums

High rise

Chemical processing

Petroleum processing

Plant_____

Inspector_____

Date_____

AISC
FC 2.1-75

CATEGORY: II

INSPECTION - EVALUATION CHECK LIST

Rating Procedure

Each item on the Inspection-Evaluation Check List will be rated from 0 to 4, or indicated "NA" on the following basis:

(0) Unsatisfactory: No effective compliance
(1) Poor: Less than minimum requirements
(2) Satisfactory: Complies with minimum requirements
(3) Good: Above minimum requirements
(4) Outstanding: Superior to others
(NA) Not Applicable: Certain items on the Inspection-Evaluation Check List may not be appropriate for the plant being certified, and should not be rated. These items will not be considered "rated items" in computing Summary Ratings.

NOTE: The Inspection-Evaluator may, at his discretion, mark an item on the Inspection-Evaluation Check List NA even though it may not be so noted, providing, a complete explanation is given for doing so. This may include items marked essential.

Minimum Ratings Required for Certification

1. Overall Rating of Total Operation* 2.5

2. Summary Ratings of Quality Assurance Functions (General Management, Engineering & Drafting, Procurement, Operations, Quality Control)* 2.0

3. Ratings of Essential Items (indicated on check list by CAPITAL LETTER) 2.0

4. Rating of Items Other than Essential Items ..... NO MINIMUM

* The detailed methods for computing these Ratings are included with the Inspection-Evaluation Report sent to each applicant for Certification.

AISC
FC 2.1-75

CATEGORY: II — INSPECTION - EVALUATION CHECK LIST

	Rating	Explanation
A. GENERAL MANAGEMENT		
1. Policy Statement		
a. DOES THIS STATEMENT AFFIRM THAT THE COMPANY POLICY IS TO DIRECT ALL ACTIVITIES OF THE ORGANIZATION IN SUCH A MANNER THAT THE FABRICATED PRODUCT MEETS THE QUALITY REQUIREMENTS SPECIFIED IN THE CONTRACT DOCUMENTS?	0 1 2 3 4	
b. DOES THIS POLICY INDICATE A RECOGNITION OF SEPARATION OF RESPONSIBILITY FOR PRODUCTION SUPERVISION FUNCTION AND QUALITY CONTROL SUPERVISION FUNCTION?	0 1 2 3 4	
c. HAS THE POLICY BEEN DISSEMINATED TO PROPER LEVELS OF MANAGEMENT AS REFLECTED BY GENERAL ATTITUDE AND AWARENESS OF QUALITY ASSURANCE REQUIREMENTS?	0 1 2 3 4	
2. Organization and Personnel		
a. Does the organization chart clearly show lines of plant management authority and lines of responsibility down to principal plant departmental supervisors?	0 1 2 3 4	
b. Adequacy of job descriptions.	0 1 2 3 4	
c. Qualification of assigned personnel for key positions.	0 1 2 3 4	
3. Procedures		
a. EFFECTIVENESS OF PLANT MANAGEMENT REVIEW OF ASSIGNED WORK TO DETERMINE QUALITY REQUIREMENTS.	0 1 2 3 4	
b. EFFECTIVENESS OF PROCEDURE FOR DISTRIBUTION OF SPECIAL QUALITY REQUIREMENTS TO PLANT DEPARTMENTS.	0 1 2 3 4	
c. Effectiveness of review procedures for fabrication and erection prior to start of fabrication.	0 1 2 3 4	
d. Effectiveness of any technical support for meeting quality requirements from sources outside the plant or from higher management.	0 1 2 3 4	

Plant _____ Inspector _____ Date _____

CATEGORY: II	INSPECTION-EVALUATION CHECK LIST	Rating	Explanation

A. GENERAL MANAGEMENT (continued)

4. Facilities and Equipment

a. Does management have an adequate and current inventory of fabrication equipment in the plant? 0 1 2 3 4 _____

b. Does the Plant Manager have space and clerical assistance to permit efficient performance? 0 1 2 3 4 _____

5. Record

Does the fabricator have verification and evaluation of his records of work which demonstrates the effect of his quality assurance program? 0 1 2 3 4 _____

Plant_____ Inspector_____ _____Date _____

CATEGORY: II INSPECTION - EVALUATION CHECK LIST | Rating | Explanation

B. ENGINEERING AND DRAFTING

1. Policy Statement

a. Does this policy affirm the company will provide shop detail drawings and instructions which adequately interpret the owner's designs and specifications and which are approved by the owner? 0 1 2 3 4 _____

b. Has this policy been disseminated to proper levels of supervison as reflected by general attitude and awareness of quality assurance requirements? 0 1 2 3 4 _____

2. Organization & Personnel

If there is an organized in-house Drafting Department, the following questions are to be evaluated. (a thru h) (May be NA)

a. IS THERE IN-HOUSE DRAFTING CAPABILITY WITH DRAFTSMEN AND CHIEF DRAFTSMAN WHO IS AN ENGINEERING TECHNICIAN (SOME TRADE SCHOOL OR COLLEGE TRAINING AND/OR EXPERIENCE) OR C.E. OR REGISTERED P.E.? 0 1 2 3 4 _____

b. Is the Drafting Department formally organized and does it include an organization chart with written responsibilites for each position? 0 1 2 3 4 _____

c. Are the lines of authority and responsibility for the Drafting Department clearly shown with respect to other departments? 0 1 2 3 4 _____

d. Adequacy of the Chief Draftsman's knowledge of applicable codes and specifications. 0 1 2 3 4 _____

e. Adequacy of provisions and personnel to list, specify, and define material requirement definitions. 0 1 2 3 4 _____

f. Do these people have adequate knowledge of the applicable material specifications? 0 1 2 3 4 _____

g. Do these people have adequate knowledge of mill rolling practices as they affect structural steel detailing? 0 1 2 3 4 _____

h. Is there an adequate drafting squad including an experienced Squad Foreman? 0 1 2 3 4 _____

i. Adequacy of personnel available to provide technical answers to other departments. 0 1 2 3 4 _____

Plant _____ Inspector _____ Date _____

CATEGORY: II INSPECTION-EVALUATION CHECK LIST Rating Explanation

B. ENGINEERING AND DRAFTING (cont'd)

2. Organization & Personnel (cont'd)

If detail drawings are sublet, the following questions are to be evaluated. (j thru o) (May be NA)

j. ARE SHOP DETAILS SUBLET TO A QUALIFIED STRUCTURAL DRAFTING FIRM WHO HAS A CHIEF DRAFTSMAN WHO IS AN ENGINEERING TECHNICIAN (SOME TRADE SCHOOL OR COLLEGE TRAINING AND/OR EXPERIENCE) OR C.E. OR REGISTERED P.E.? 0 1 2 3 4 _____

k. IS THERE AN IN-HOUSE PERSON CAPABLE OF SUPERVISING, EVALUATING AND COORDINATING OUTSIDE SHOP DETAIL DRAWINGS? 0 1 2 3 4 _____

l. Does this person transmit standards and assure adequate compliance by the sublet detailer? 0 1 2 3 4 _____

m. Does this person have adequate knowledge of applicable code and specifications? 0 1 2 3 4 _____

n. Does this person have adequate knowledge of the applicable material specifications? 0 1 2 3 4 _____

o. Does this person have adequate knowledge of mill rolling tolerances as they affect structural steel detailing? 0 1 2 3 4 _____

If there is an organized in-house Design Engineering Department, the following questions are to be evaluated. (p thru t) (May be NA)

p. Is the Engineering Department formally organized and does it include an organization chart with written responsibilities for each position? 0 1 2 3 4 _____

q. Are the lines of authority and responsibility for the Engineering Department clearly shown with respect to other departments? 0 1 2 3 4 _____

r. Is there a person capable of supervising in-house design or evaluating and coordinating outside design? 0 1 2 3 4 _____

s. Does this person have adequate knowledge of applicable codes and specifications? 0 1 2 3 4 _____

t. Does the company have adequate in-house design engineers or does it consistently use consultants qualified by registration or experience? 0 1 2 3 4 _____

Plant_____ Inspector _____ Date _____

CATEGORY: II	INSPECTION - EVALUATION CHECK LIST	Rating	Explanation

B. ENGINEERING AND DRAFTING (continued)

3. Procedures

a.	DOES THE DRAFTING DEPARTMENT MAINTAIN A CURRENT LOG OF DESIGN DRAWINGS AND SPECIFICATION RECEIPTS WITH LATEST REVISIONS AND DISPOSITIONS?	0 1 2 3 4
b.	DETAIL DRAWINGS CHECKED BY QUALIFIED PERSONNEL.	0 1 2 3 4
c.	DOES THE DRAFTING DEPARTMENT MAINTAIN A CURRENT LOG OF SHOP DETAIL DRAWINGS WITH LATEST APPROVAL, REVISIONS AND DISPOSITIONS?	0 1 2 3 4
d.	ARE COPIES OF APPROVED SPECIAL PROCEDURES, IN ADDITION TO WELDING, FURNISHED TO QUALITY CONTROL AND PRODUCTION SUPERVISORS?	0 1 2 3 4
e.	Current log of special process instructions with latest approval, revisions, dissemination and control.	0 1 2 3 4
f.	Changes to drawings and documents reviewed and approved by those who originated the documents.	0 1 2 3 4
g.	Provisions to assure that obsolete drawings and documents are destroyed or isolated from use.	0 1 2 3 4
h.	Adequacy of established drafting standards and are there procedures to assure compliance both in house and on sublet work.	0 1 2 3 4
i.	DRAFTING PROCEDURES TO ESTABLISH IDENTITY OF MAIN MATERIAL IN FINAL STRUCTURE SO THAT IT CAN BE TRACED TO MATERIAL REQUISITIONS AND MILL TEST REPORTS AND ARE PROCEDURES USED TO ASSURE COMPLIANCE BOTH IN HOUSE AND ON SUBLET-DRAFTING WORK?	0 1 2 3 4

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CATEGORY: II — INSPECTION-EVALUATION CHECK LIST	Rating	Explanation
B. ENGINEERING AND DRAFTING (Continued)		
3. Procedures (Continued)		
j. Procedure for control, distribution and revision of job specifications to shop force and quality control.	0 1 2 3 4	
k. Procedure for coordinating drafting procedures with field erection requirements.	0 1 2 3 4	
ℓ. EFFECTIVENESS OF WRITTEN PROCEDURE FOR RECEIPT REVIEW AND CONTROL OF DESIGN AND REVISIONS AND ARE THESE PROCEDURES FOLLOWED ON IN HOUSE AND SUBLET WORK.	0 1 2 3 4	
m. Provision and requirement for acknowledgement of receipt of above by persons responsible for Quality Control.	0 1 2 3 4	
4. Facilities and Equipment		
a. CURRENT REFERENCE LIBRARY OF SPECIFICATIONS INCLUDING: AWS ASTM AISC Quality Criteria Guide to Shop Painting Steel Construction Manual Structural Steel Detailing SSPC	0 1 2 3 4	
b. Legible shop prints provided.	0 1 2 3 4	

Plant _____ Inspector _____ Date _____

CATEGORY: II

INSPECTION-EVALUATION CHECK LIST

Rating

Explanation

C. PROCUREMENT

1. Policy Statement

Does this statement affirm the Company policy to obtain material and services in conformance with contract documents and specifications? 0 1 2 3 4 _____

2. Organization and Personnel

Material ordering personnel specifically trained for purchasing of materials. 0 1 2 3 4 _____

3. Procedures

a. MATERIAL ORDERED TO A PARTICULAR SPECIFICATION. 0 1 2 3 4 _____

b. Fabricated purchased items subject to same Quality Control criteria as in-plant fabricated items. 0 1 2 3 4 _____

c. Where a level of certification is required by contract documents, is sublet fabrication awarded to fabricator holding appropriate certification? 0 1 2 3 4 _____

d. Procurement sources adequately evaluated. 0 1 2 3 4 _____

e. Mill materials inspected upon receipt and marked for permanent identification. 0 1 2 3 4 _____

f. All other purchased materials (bolts, paint, castings, etc.) checked for conformance to purchasing document upon receipt. 0 1 2 3 4 _____

g. Controls set up to insure proper usage of purchase items. 0 1 2 3 4 _____

h. RECORDS MAINTAINED AND PROCEDURES FUNCTIONING TO INSURE TRACEABILITY OF GRADE, AND WHERE REQUIRED, HEAT NUMBERS AND MATERIAL TEST REPORTS FOR SPECIAL REQUIREMENTS. 0 1 2 3 4 _____

i. MANUFACTURERS' TEST REPORTS OF BOLTS, WELD WIRE, PAINT, ETC., KEPT ON FILE. 0 1 2 3 4 _____

j. MILL TEST REPORTS KEPT ON FILE. 0 1 2 3 4 _____

4. Equipment and Facilities

File of current ASTM specifications available to Procurement personnel. 0 1 2 3 4 _____

Plant _____ Inspector _____ Date _____

CATEGORY: II	INSPECTION - EVALUATION CHECK LIST	Rating	Explanation

D. OPERATIONS

1. Policy Statement

a. Does this statement affirm Company policy - "To manufacture from approved shop detail drawings and procedures and ship a finished product in accordance with contract documents and specifications"? 0 1 2 3 4 _____

b. Is there an adequate policy for resolving controversy between Operations and Quality Control on nonconforming items. 0 1 2 3 4 _____

c. Does the company policy statement indicate a recognition of separation of Production responsibility from Quality Control responsibility? 0 1 2 3 4 _____

d. Are these policies known and disseminated to supervisory personnel as reflected by general attitude and awareness of quality assurance requirements. 0 1 2 3 4 _____

2. Organization and Personnel

a. Does organization chart show clearly lines of responsibility and authority? 0 1 2 3 4 _____

b. Job descriptions available and adequate. 0 1 2 3 4 _____

c. Supervisors qualified by experience and/or education. 0 1 2 3 4 _____

d. DOES THE FABRICATOR HAVE A COMPETENT WELDING TECHNICIAN OR SUPERINTENDENT OR AN OUTSIDE EXPERT AVAILABLE ON CALL ? 0 1 2 3 4 _____

e. Does this person have the authority to control welding procedures in the shop? 0 1 2 3 4 _____

f. WELDERS CERTIFIED PER A.W.S. 0 1 2 3 4 _____

g. DOES THE FABRICATOR HAVE A WELDER IDENTIFICATION SYSTEM? 0 1 2 3 4 _____

h. SHOP SUPERVISION CONVERSANT WITH CURRENT WORKMANSHIP PROVISIONS OF AWS AND AISC SPECIFICATIONS. 0 1 2 3 4 _____

Plant _____ Inspector _____ Date _____

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CATEGORY: II

INSPECTION - EVALUATION CHECK LIST | Rating | Explanation

D. OPERATIONS (cont'd)

3. Procedures

a. Material Receipt and Storage

i. GRADE OF MATERIAL AND MARKING VERIFIED PRIOR TO FABRICATION.	0 1 2 3 4	
ii. Raw material blocked and handled to prevent permanent distortion.	0 1 2 3 4	
iii. ADEQUATE AND PROPER STORAGE FOR WELDING ELECTRODES, FLUX, BOLTS, RIVETS AND PAINT.	0 1 2 3 4	

b. Fabrication

i. Adequacy of procedure for distributing drawings to the shop force.	0 1 2 3 4	
ii. Adequacy of procedure for handling revisions and voided drawings.	0 1 2 3 4	
iii. ADEQUACY OF PROCEDURE FOR INSTRUCTING THE SUPERVISORS AND WORKMEN ABOUT SPECIFICATIONS, INCLUDING WELDING PROCEDURES AND SPECIAL REQUIREMENTS.	0 1 2 3 4	
iv. MATERIAL IDENTIFIED WHEN TRANSFERRED FROM STORAGE TO SHOP PRIOR TO PROCESSING.	0 1 2 3 4	
v. IS THIS IDENTITY RETAINED DURING FABRICATION?	0 1 2 3 4	
vi. Adequacy of system for assuring proper application of material cut from larger pieces.	0 1 2 3 4	
vii. Grade identification retained on material returned to stock.	0 1 2 3 4	
viii. Is material inspected for conformance to ASTM-A6 standard?	0 1 2 3 4	
ix. WELDING ROD AND WELDING FLUXES ADEQUATELY IDENTIFIED WHEN STORED.	0 1 2 3 4	
x. FLUX AND ROD OVENS ADEQUATE AND OPERATING PER AWS LATEST ADOPTION.	0 1 2 3 4	

Plant_____ Inspector_____ Date_____

CATEGORY: II INSPECTION-EVALUATION CHECK LIST Rating Explanation

D. OPERATIONS (continued)

3. Procedures (continued)

b. Fabrication (continued)

xi.	RECORD OF WELDER QUALIFICATIONS AND WELDER IDENTIFICATION SYSTEM MAINTAINED IN THE SHOP.	0 1 2 3 4	_____
xii.	Welders clean slag and check their welds.	0 1 2 3 4	_____
xiii.	Welders identify welds they make.	0 1 2 3 4	_____
xiv.	Checking of workmanship throughout the process to conform to contract documents and specifications.	0 1 2 3 4	_____
xv.	PROPER BOLT TIGHTENING PROCEDURES USED PER RCRBSJ SPECIFICATIONS.	0 1 2 3 4	_____
xvi.	Program for calibrating tools, gauges and tapes used in production.	0 1 2 3 4	_____
xvii.	When and if required by contract documents, is there a procedure to maintain records of lot number identity of bolts and rivets used in fabrication.	0 1 2 3 4	_____

c. Clean and Paint

i.	Pre-blasting or post-blasting equipment. (May be NA depending upon type of work)	0 1 2 3 4	_____
ii.	Provisions for control of surface preparation in accordance with SSPC standards.	0 1 2 3 4	_____
iii.	Provision for adequate agitation, temperature control and methods of paint application.	0 1 2 3 4	_____
iv.	Provision for wet and dry film measurement control.	0 1 2 3 4	_____

Plant_____ Inspector_____ Date_____

CATEGORY: II	INSPECTION - EVALUATION CHECK LIST	Rating	Explanation

D. OPERATIONS (continued)

3. Procedures (continued)

d. Corrective Action

i. Procedure for correcting nonconforming material or work in process rejected by the Quality Control forces. 0 1 2 3 4 _____

ii. Does this procedure assure the level of authority is commensurate with the problem? 0 1 2 3 4 _____

iii. System used to indicate conforming or nonconforming work in progress. 0 1 2 3 4 _____

iv. Does the procedure include provision for action to avoid future nonconforming work? 0 1 2 3 4 _____

e. Shipping

i. Provisions for suitable loading, blocking and bracing for shipment. 0 1 2 3 4 _____

f. Maintenance

i. EQUIPMENT AND TOOLS PERIODICALLY INSPECTED TO INSURE ACCEPTABLE PERFORMANCE. 0 1 2 3 4 _____

ii. WELDING MACHINES PERIODICALLY CHECKED TO INSURE CORRECT AMP AND VOLT READINGS. 0 1 2 3 4 _____

iii. Plan for systematic maintenance of equipment equipment. 0 1 2 3 4 _____

Plant _____ Inspector _____ Date _____

CATEGORY: II

INSPECTION-EVALUATION CHECK LIST | Rating | Explanation

D. OPERATIONS (continued)

4. Facilities and Equipment for Fabrication

a. Does fabricator have automatic or semi-automatic equipment for making continuous welds, etc?	0 1 2 3 4	
b. Manual welding equipment in use in acceptable operating condition.	0 1 2 3 4	
c. Does fabricator have mechanically-guided burning equipment?	0 1 2 3 4	
d. Does fabricator have a wheelblast or sandblast equipment? (May be NA)	0 1 2 3 4	
e. Does fabricator have mechanical paint agitators and other painting equipment?	0 1 2 3 4	
f. If fabricator is involved in riveting, metalizing and stud welding, is his equipment adequate? (May be NA depending on type of work)	0 1 2 3 4	
g. Does fabricator have adequate and accurate hole-making equipment? (Punches and Drills)	0 1 2 3 4	
h. Does fabricator have adequate and accurate cutting and finishing equipment? (Shears, saw, milling machine, planer and/or grinder)	0 1 2 3 4	
i. Housekeeping adequate.	0 1 2 3 4	
j. Air supply adequate.	0 1 2 3 4	
k. Electrical supply adequate.	0 1 2 3 4	

Plant _____ Inspector _____ Date _____

CATEGORY: II

INSPECTION-EVALUATION CHECK LIST

Rating

Explanation

E. QUALITY CONTROL

1. Policy Statement

a. Does this statement affirm that the Company policy is "To provide the inspection and control procedures to assure that the fabricated product is in accordance with contract documents and specifications?" 0 1 2 3 4 _____

b. Does policy indicate a recognition of separation of Quality Control responsibility from Production responsibility? 0 1 2 3 4 _____

c. Is there a written Quality Assurance Program and is it disseminated as reflected by general attitude and awareness of Quality Assurance requirements. 0 1 2 3 4 _____

2. Organization and Personnel

a. Does the Quality Control Organization include a qualified Quality Control Supervisor? 0 1 2 3 4 _____

b. Qualified testing service available and used if required. 0 1 2 3 4 _____

c. ARE THERE QUALIFIED SHOP INSPECTORS? 0 1 2 3 4 _____

d. Does the Quality Control Organization include at least one qualified in-house Magnetic Particle Inspection Technician? 0 1 2 3 4 _____

e. Does organization chart show lines of communication and responsibility? 0 1 2 3 4 _____

f. Program for training shop inspectors. 0 1 2 3 4 _____

g. Separation of Quality Control Organization from Production Organization below the Plant Manager clearly shown? 0 1 2 3 4 _____

h. Does the Quality Control Organization include at least one certified in-house Ultrasonic Testing Technician? 0 1 2 3 4 _____

Plant _____ Inspector _____ Date _____

CATEGORY: II	INSPECTION-EVALUATION CHECK LIST	Rating	Explanation

E. QUALITY CONTROL (continued)

3. Procedures

a.	CONTRACT SPECIFICATIONS AND SPECIAL PROVISIONS ON FILE.	0 1 2 3 4	
b.	DOES QUALITY CONTROL HAVE AUTHORITY TO STOP AND RESPONSIBILITY TO INFORM OPERATING SUPERVISION ON NONCONFORMING WORK?	0 1 2 3 4	
c.	Is a check made to ensure that approved welding procedures are disseminated and followed in the shop?	0 1 2 3 4	
d.	Required records maintained: Of Heat Numbers and material test reports for special requirements.	0 1 2 3 4	
e.	Required records maintained of N.D.T. Reports.	0 1 2 3 4	
f.	RECORD OF QUALIFIED WELDERS ON FILE.	0 1 2 3 4	
g.	An adequate in-process inspection procedure.	0 1 2 3	
h	Adequate procedure for handling nonconforming material.	0 1 2 3 4	
i.	Adequate procedures for liason with outside inspectors.	0 1 2 3 4	
j.	Do all pieces receive a final inspection and is a record kept of this inspection?	0 1 2 3 4	
k.	Procedures for calibrating tapes, N. D. T. equipment, paint gauges and a record kept.	0 1 2 3 4	
l.	Procedures for shop inspector qualifications.	0 1 2 3 4	
m.	Record kept of all inspections, such as by noted detail drawings.	0 1 2 3 4	
n.	Does an inspector check surface preparation prior to painting.	0 1 2 3 4	
o.	Does an inspector check painting?	0 1 2 3 4	
p.	A Quality Control procedure manual.	0 1 2 3 4	

Plant _____ Inspector _____ Date _____

CATEGORY: II | INSPECTION-EVALUATION CHECK LIST | Rating | Explanation

E. QUALITY CONTROL (continued)

4. Facilities and Equipment

a. A CURRENT LIBRARY OF SPECIFICATIONS, INCLUDING:

AWS
AISC
Quality Control
Guide to Shop Painting
ASTM
ASNDT
SSPC

Rating: 0 1 2 3 4 _____

b. DO THE INSPECTORS HAVE THE FOLLOWING EQUIPMENT AVAILABLE?

Tapeline
Welding Gauges
Tag System
Paint Gauge

Rating: 0 1 2 3 4 _____

c. The following equipment available.

X-Ray
Ultrasonic
Magnetic Particle
Isotope
Dye Penetrant

Rating: 0 2 3 4 _____

d. Reference standards for periodically calibrating:

Paint Gauges
Tapeline
N.D.T. Equipment
Torque Wrenches

Rating: 0 1 2 3 4 _____

e. Office space for outside inspectors.

Rating: 0 1 2 3 4 _____

Plant _____ Inspector _____ Date _____

INSPECTION - EVALUATION - EXIT INTERVIEW

REPORT OF RATED ITEMS WITH LESS THAN 2 RATING WHICH INDICATES AN OMISSION OR A DEFICIENCY.

THE INSPECTION - EVALUATION TEAM WILL LIST AND EXPLAIN THE REASON FOR ANY RATED ITEM WITH A RATING LESS THAN 2.

	FUNCTION	EXPLANATION
A.	GENERAL MANAGEMENT	
B.	ENGINEERING & DRAFTING	
C.	PROCUREMENT	
D.	OPERATIONS	
E.	QUALITY CONTROL	

Plant_____ Inspector_____ Date _____

AISC
FC 2.2-75

AMERICAN INSTITUTE OF STEEL CONSTRUCTION

QUALITY CERTIFICATION PROGRAM

INSPECTION - EVALUATION REPORT

CATEGORY: II

Check One

Initial Certification
Renewal (2nd or 3rd year)
Renewal (1st year of new cycle)

Fabricator: _____

Surveyed By: _____ Date: _____

Street Address: _____ City/State: _____ Zip: _____

Persons Contacted:

Name: 1. _____ 3. _____ 5. _____

Title: _____

Name: 2. _____ 4. _____ 6. _____

Title: _____

Certification recommended

Certification not recommended

If not recommended, indicate reason(s): _____

_____

_____

Signed _____

Date _____

9/19/75

INSPECTION - EVALUATION REPORT

SUMMARY RATING OF GENERAL MANAGEMENT

		Relative % Weight for each Segment		Rating per Segment
A1.	Policy Statement			
	$\frac{\text{total points}}{\text{number of rated items}}$	X 15%	=	_____
A2.	Organization & Personnel			
	$\frac{\text{total points}}{\text{number of rated items}}$	X 30%	=	_____
A3.	Procedures			
	$\frac{\text{total points}}{\text{number of rated items}}$	X 20%	=	_____
A4.	Facilities & Equipment			
	$\frac{\text{total points}}{\text{number of rated items}}$	X 10%	=	_____
A5.	Record			
	$\frac{\text{total points}}{\text{number of rated items}}$	X 25%	=	_____
Summary Rating of General Management:		100%		_____

Check One

Approved

Disapproved

Plant _____ Inspector _____ Date _____

CATEGORY: II

INSPECTION - EVALUATION REPORT

SUMMARY RATING OF ENGINEERING/DRAFTING

		Relative % Weight for each Segment		Rating per Segment
B1.	Policy Statement			
	$\frac{\text{total points}}{\text{number of rated items}}$	X 10%	=	_____
B2.	Organization & Personnel			
	$\frac{\text{total points}}{\text{number of rated items}}$	X 40%	=	_____
B3.	Procedures			
	$\frac{\text{total points}}{\text{number of rated items}}$	X 40%	=	_____
B4.	Facilities & Equipment			
	$\frac{\text{total points}}{\text{number of rated items}}$	X 10%	=	_____
Summary Rating of Engineering/Drafting:		100%		_____

Check One

Approved

Disapproved

Plant _____ Inspector _____ Date _____

INSPECTION-EVALUATION REPORT

SUMMARY RATING OF PROCUREMENT

		Relative % Weight for each Segment		Rating per Segment
C1.	Policy Statement			
	$\frac{\text{total points}}{\text{number of rated items}}$	X 10%	=	_____
C2.	Organization & Personnel			
	$\frac{\text{total points}}{\text{number of rated items}}$	X 30%	=	_____
C3.	Procedures			
	$\frac{\text{total points}}{\text{number of rated items}}$	X 50%	=	_____
C4.	Equipment & Facilities			
	$\frac{\text{total points}}{\text{number of rated items}}$	X 10%	=	_____
Summary Rating of Procurement:		100%		_____

Check One

Approved

Disapproved

Plant _____ Inspector _____ Date _____

INSPECTION - EVALUATION REPORT

SUMMARY RATING OF OPERATIONS

		Relative % Weight for each Segment		Rating per Segment
D1.	Policy Statement			
	$\frac{\text{total points}}{\text{number of rated items}}$	X 10%	=	_____
D2.	Organization & Personnel			
	$\frac{\text{total points}}{\text{number of rated items}}$	X 35%	=	_____
D3.	Procedures			
	$\frac{\text{total points}}{\text{number of rated items}}$	X 35%	=	_____
D4.	Facilities & Equipment			
	$\frac{\text{total points}}{\text{number of rated items}}$	X 20%	=	_____
Summary Rating of Operations		100%		_____

Check One

Approved

Disapproved

Plant _____ Inspector _____ Date _____

CATEGORY: II

INSPECTION - EVALUATION REPORT

SUMMARY RATING OF QUALITY CONTROL

		Relative % Weight for each Segment		Rating per Segment
E1.	Policy Statement			
	$\frac{\text{total points}}{\text{number of rated items}}$	X 5%	=	_____
E2.	Organization & Personnel			
	$\frac{\text{total points}}{\text{number of rated items}}$	X 40%	=	_____
E3.	Procedures			
	$\frac{\text{total points}}{\text{number of rated items}}$	X 50%	=	_____
E4.	Equipment & Facilities			
	$\frac{\text{total points}}{\text{number of rated items}}$	X 5%	=	_____
Summary Rating of Quality Control:		100%		_____

Check One

Approved

Disapproved

Plant _____ Inspector _____ Date _____

CATEGORY: II

INSPECTION - EVALUATION REPORT

OVERALL RATING OF TOTAL OPERATION

FUNCTION		SUMMARY RATING	% WEIGHT	WEIGHTED RATING
A.	General Management		X 10%	
B.	Engineering/Drafting		X 15%	
C.	Procurement		X 10%	
D.	Operations		X 40%	
E.	Quality Control		X 25%	
	Overall Rating of Total Operation		100%	

RATING OF ESSENTIAL ITEMS

ITEM	RATING	ITEM	RATING	ITEM	RATING	ITEM	RATING	ITEM	RATING
A1a		B2a		C3a		D2d		E2c	
A1b		B2j		C3h		D2f		E3a	
A1c		B2k		C3i		D2g		E3b	
A3a		B3a		C3j		D2h		E3f	
A3b		B3b				D3a i		E4a	
		B3c				D3a iii		E4b	
		B3d				D3b iii			
		B3i				D3b iv			
		B3ℓ				D3b v			
		B4a				D3b ix			
						D3b x			
						D3b xi			
						D3b xv			
						D3f i			
						D3f ii			

Check One

Approved

Disapproved

Plant _____ Inspector _____ Date _____

A P P E N D I X - C

AMERICAN INSTITUTE OF STEEL CONSTRUCTION

SUPPLEMENTAL QUALITY CERTIFICATION INSPECTION EVALUATION CHECK LIST

AUXILIARY AND SUPPORT STRUCTURES

FOR

NUCLEAR POWER PLANTS

PLANT_____

INSPECTOR_____

DATE_____

AISC SUPPLEMENTAL QUALITY CERTIFICATION FOR AUXILIARY AND SUPPORT STRUCTURES FOR NUCLEAR POWER PLANTS

The fabricators quality assurance manual, which must be submitted upon application for certification, will be thoroughly reviewed by AISC's independent consulting firm prior to scheduling the plant inspection-evaluation Any required clarification or modification must be completed prior to the scheduling of the plant audit.

RATING PROCEDURE

Each item on the Inspection-Evaluation Check List will be rated satisfactory (s), Not Applicable (NA), or Unsatisfactory (X) on the following basis:

(S) SATISFACTORY: Complies with minimum requirements

(NA) NOT APPLICABLE: Certain items on the Inspection-Evaluation Check List may not be appropriate for the plant being certified, and should not be rated.

(X) UNSATISFACTORY: No effective compliance

REQUIRED FOR CERTIFICATION

Each item on the Inspection-Evaluation Check List must be rated Satisfactory (S), or Not Applicable (NA) to achieve certification.

At its absolute discretion the Inspection-Evaluation team has the authority to conditionally accept the plant, provided minor dificiencies are corrected within a reasonable period of time.

ITEM NO.	REQUIREMENT	QA MANUAL REFERENCE	S, X, or NA	COMMENTS
1.0	ORGANIZATION			
1.1	Does the Quality Assurance Manual include an organizational chart showing titles of the various positions and the lines of authority?			
1.2	Does the organizational chart agree with lines of authority actually in existance?			
1.3	Does the program designate the person with overall responsibility for Quality Assurance?			
1.4	Is this person independent from the pressures of production?			
1.5	Does he report to an organizational level where appropiate management action may be taken?			

PLANT_____ EVALUATOR_____ DATE_____

ITEM NO.	REQUIREMENT	QA MANUAL REFERENCE	S, X, or NA	COMMENTS
1.0	ORGANIZATION (Cont'd)			
1.6	Do the personnel performing the quality functions have sufficient authority and freedom to; a) identify quality problems, b) initiate, recommend, or provide solution, through designated channels, c) control further processing of a nonconforming item until proper disposition has been made, d) Verify implementation of problem solutions.			
1.7	Are the functions such as auditing, inspection, and testing performed independent of those performing the activity?			

PLANT_____ EVALUATOR _____ DATE_____

ITEM NO.	REQUIREMENT	QA MANUAL REFERENCE	S, X, or NA	COMMENTS
2.0	QUALITY ASSURANCE PROGRAM			
2.1	Has the fabricator established his Quality Assurance Program documented with written policies, procedures and instructions?			
2.2	Does the Quality Assurance Manual contain a statement of policy signed by management?			
2.3	Does the Quality Assurance Manual identify the authority and responsibility of the various personnel and organizations?			
2.4	Have personnel performing activities affecting quality received training and indoctronation in the program?			
2.5	Does management regularly review the status and adequacy of the quality assurance program?			

PLANT_____ EVALUATOR_____ DATE_____

ITEM NO.	REQUIREMENT	QA MANUAL REFERENCE	S,X, or NA	COMMENTS
3.0	DESIGN - NOT APPLICABLE			

PLANT_____ EVALUATOR_____ DATE_____

AISC
NUCLEAR CERTIFICATION PROGRAM
EVALUATION/AUDIT CHECKLIST

ITEM NO.	REQUIREMENT	QA MANUAL REFERENCE	S,X, or NA	COMMENTS
4.0	PROCUREMENT DOCUMENT CONTROL			
4.1	Are procedures established or do written instructions exist to insure that the following quality requirements will be noted on procurement documents?			
4.1.1	That this material is for use in Category I-Nuclear Construction.			
4.1.2	Special technical requirements referenced (test and inspection requirements, and any other special instructions).			

PLANT _____ EVALUATOR _____ DATE _____

ITEM NO.	REQUIREMENT	QA MANUAL REFERENCE	S,X, or NA	COMMENTS
4.0	PROCUREMENT DOCUMENT CONTROL (Cont'd)			
4.1.3	Provision for access to the plant facilities and records for source inspection and audit when the need for inspection or audit has been determined.			
4.1.4	Records to be prepared, maintained, submitted, or made available for review and instructions provided on record retention and disposition.			
4.1.5	Provisions for extending applicable requirements of procurement documents to lower tier subcontractors and suppliers.			
4.2	Are changes in procurement documents subject to the same degree of control as was utilized in the preparation of the original contract document?			

PLANT_____ EVALUATOR _____ DATE_____

ITEM NO.	REQUIREMENT	QA MANUAL REFERENCE	S, X, or NA	COMMENTS
4.0	PROCUREMENT DOCUMENT CONTROL (CONT'D)			
4.3	Does the system provide for review, by a Quality Assurance designee, of procurement documents prior to release?			

PLANT_____ EVALUATOR_____ DATE_____

ITEM NO.	REQUIREMENT	QA MANUAL REFERENCE	S,X, or NA	COMMENTS
5.0	INSTRUCTIONS, PROCEDURES AND DRAWINGS			
5.1	Are activities affecting quality controlled by instructions, procedures, or drawings?			
5.2	Do instructions, procedures or shop drawings convey the acceptance criteria specified in the contract documents?			

PLANT_____ EVALUATOR_____ DATE_____

ITEM NO.	REQUIREMENT	QA MANUAL REFERENCE	S,X, or NA	COMMENTS
6.0	DOCUMENT CONTROL			
6.1	Are written procedures established for issuance of the Quality Assurance Manual, instructions, procedures and drawings, and changes thereto?			
6.2	Are documents, including changes, reviewed for adequacy and signed off prior to release by authorized personnel?			
6.3	Are changes to documents reviewed and signed off by the same department that performed the original review?			
6.4	Do procedures control the receipt and distribution of design drawings, contract documents and changes?			
6.5	Do procedures assure that the latest applicable drawings, specifications and instructions are being used?			

PLANT_____ EVALUATOR_____ DATE_____

ITEM NO.	REQUIREMENT	QA MANUAL REFERENCE	S,X, or NA	COMMENTS
6.0	DOCUMENT CONTROL (CONT'D)			
6.6	Is the distribution for each document defined?			
6.7	Are there procedures to control both in-house and sub-contracted shop drawings?			
6.8	Are documents distributed to and used at the location where they apply?			

PLANT_____ EVALUATOR_____ DATE_____

ITEM NO.	REQUIREMENT	QA MANUAL REFERENCE	S, X, or NA	COMMENTS
7.0	CONTROL OF PURCHASED MATERIAL, EQUIPMENT, AND SERVICES			
7.1	Is there a list of approved vendors?			
7.2	Is responsibility for preparing and maintaining the list defined?			
7.3	Are suppliers approved on the basis of one of the following?			
	a. Historical or current quality performance data for the items to be furnished?			
	b. Source evaluation or survey conducted by trained personnel.			
	c. Customers prior approval of the vendor.			
	d. AISC Certification of the vendor.			

PLANT_____ EVALUATOR_____ DATE_____

ITEM NO.	REQUIREMENT	QA MANUAL REFERENCE	S,X, or NA	COMMENTS
7.0	CONTROL OF PURCHASED MATERIAL EQUIPMENT, AND SERVICES. (Cont'd)			
7.4	Where a level of certification is required by contract documents is sublet fabrication awarded to fabricator holding appropriate certification?			
7.5	Is there documented evidence on hand to substantiate the approval of each supplier?			
7.6	Is there a procedure for maintaining an approved vendors list?			
7.7	Are purchased items compared to procurement documents upon receipt to verify conformance?			
7.8	Is source inspection or audit used when conformance cannot be verified by receipt inspection or test reports?			

PLANT_____ EVALUATOR_____ DATE_____

ITEM NO.	REQUIREMENT	QA MANUAL REFERENCE	S,X, or NA	COMMENTS
7.0	CONTROL OF PURCHASED MATERIAL EQUIPMENT, AND SERVICES(CONT'D)			
7.9	Are accepted items distinguished from items awaiting acceptance?			
7.10	Are rejected items identified and controlled?			
7.11	Are certified Mill Test Reports or other documentation reviewed and signed off by authorized personnel prior to shipment?			

PLANT_____ EVALUATOR_____ DATE_____

AISC
NUCLEAR CERTIFICATION PROGRAM
EVALUATION/AUDIT CHECKLIST

ITEM NO.	REQUIREMENT	QA MANUAL REFERENCE	S,X, or NA	COMMENTS
8.0	IDENTIFICATION AND CONTROL OF MATERIALS, PARTS, AND COMPONENTS.			
8.1	Does the fabricator have a system to supply collective traceability of material?			
8.2	Are materials, parts, and components requiring identification throughout fabrication defined by instructions, procedures or drawings?			
8.3	Are there identification and control measures to prevent the use of incorrect or defective material, parts, and components?			
8.4	Where identification marking is employed is the marking clear, unambiguous, and applied in such a manner as not to affect the function of the item?			

PLANT_____ EVALUATOR_____ DATE_____

ITEM NO.	REQUIREMENT	QA MANUAL REFERENCE	S, X, or NA	COMMENTS
8.0	IDENTIFICATION AND CONTROL OF MATERIALS, PARTS, AND COMPONENTS. (CONT'D)			
8.5	Does the traceability system provide maintenance of identification when pieces are sub-divided?			
8.6	Unless other means of identification are used, are provisions made to assure that the marking is not obliterated or hidden by surface treatment or coatings?			

PLANT_____ EVALUATOR_____ DATE_____

ITEM NO.	REQUIREMENT	QA MANUAL REFERENCE	S, X, or NA	COMMENTS
9.0	CONTROL OF SPECIAL PROCESS			
9.1	Are approved welding procedures available at the work place?			
9.2	is there written procedure for storage and control of welding electrodes in accordance with AWS D1.1?			
9.3	Are welders qualified in accordance with the provisions of AWS D1.1?			
9.4	Are the records of qualified welders current with the time period of AWS D1.1 and are they on file?			
9.5	Does the fabricator have a demonstrated system available by which weld joints are identified as to the welder who performed the welding by by acceptable means such as die stamping, travelers, or indelible marking, if required by the contract documents?			

PLANT _____ EVALUATOR _____ DATE _____

ITEM NO.	REQUIREMENT	QA MANUAL REFERENCE	S, X, or NA	COMMENTS
9.0	CONTROL OF SPECIAL PROCESS (CONT'D)			
9.6	Are heat treating procedures for stress relieving purposes available when applicable and are appropiate records maintaned?			
9.7	Do procedures provide for pre-heating in accordance with AWS D1.1?			
9.8	Is there a written procedure for each applicable non-destructive testing method (Radiography, Ultrsonic testing, Magnetic Particle, Dye Penetrant) in accordance with AWS D1.1?			
9.9	Are qualifications of NDE personnel in accordance with ASNT and are they on file?			
9.10	Are visual standards and written procedures available for control of surface preparation in accordance with SSPC or other specified standards?			
9.11	Are measurement devices and written procedures available and in use to control film thickness of protective coatings?			

ITEM NO.	REQUIREMENT	QA MANUAL REFERENCE	S, X, or NA	COMMENTS
9.0	CONTROL OF SPECIAL PROCESS (CONT'D)			
9.12	Are agitators, spray or other application equipment, surface thermometers, psychrometers or humidity gages, available and in use in the control of coating application when required?			
9.13	Are records maintained of cleaning inspection, handling of coatings, film thickness and surface quality inspection, and temperature, humidity and dewpoint at time of coating application when required?			

PLANT _____ EVALUATOR _____ DATE _____

ITEM NO.	REQUIREMENT	QA MANUAL REFERENCE	S,X, or NA	COMMENTS
10.0	INSPECTION			
10.1	Is the inspection program documented by written instructions and procedures?			
10.2	Is there an inspection of all fabricated pieces?			
10.3	Is the work inspected in process where quality cannot be verified in the final inspection?			
10.4	Are records of inspections maintained?			
10.5	Do these records include the date, inspector identification and acceptance/rejection of inspection?			

PLANT_____ EVALUATOR_____ DATE_____

ITEM NO.	REQUIREMENT	QA MANUAL REFERENCE	S,X, or NA	COMMENTS
11.0	TEST CONTROL -(NOT APPLICABLE FOR FABRICATED STRUCTURAL STEEL)			

PLANT_____ EVALUATOR_____ DATE_____

ITEM NO.	REQUIREMENT	QA MANUAL REFERENCE	S,X, or NA	COMMENTS
12.0	CONTROL OF MEASURING AND TEST EQUIPMENT			
12.1	Are written procedures in effect defining methods for calibration of all tools, gauges, instruments, or other devices used as acceptance criteria?			
12.2	Are these tools, gauges, instruments or other devices suitable within the frame work of normal fabricating practice to verify conformance to established contract requirements?			
12.3	Is the inspection, measuring and test equipment adjusted and maintained at specified intervals, or prior to use, when required, against certified equipment having known valid relationships to nationally recognized standards?			

PLANT_____ EVALUATOR_____ DATE_____

ITEM NO.	REQUIREMENT	QA MANUAL REFERENCE	S, X, or NA	COMMENTS
12.0	CONTROL OF MEASURING AND TEST EQUIPMENT (CONT'D)			
12.4	Are calibration records maintained and validated by authorized personnel, and is equipment suitably identified to indicate the calibration status?			

PLANT_____ EVALUATOR_____ DATE_____

ITEM NO.	REQUIREMENT	QA MANUAL REFERENCE	S, X, or NA	COMMENTS
13.0	HANDLING, STORAGE & SHIPPING			
13.1	Is marking or tagging of items kegs, drums, and boxes adequate to identify shipping pieces and maintain identification throughout shipment?			
13.2	Does the fabricators system provide for written instructions for handling, preservation, or loading of material to minimize damage in shipment or storage?			

PLANT _____ EVALUATOR _____ DATE _____

ITEM NO.	REQUIREMENT	QA MANUAL REFERENCE	S,X, or NA	COMMENTS
14.0	INSPECTION, TEST, AND OPERATING STATUS - (TEST AND OPERATING STATUS ARE NOT NORMALLY APPLICABLE TO STRUCTURAL STEEL).			
14.1	Is inspection status identified by either:			
	a. Tagging			
	b. Marking			
	c. Shop Travelers			
	d. Inspection Records			
14.2	Is authority for application and removal of such identification defined in writing?			
14.3	Is this authority understood and recognized by all parties?			
14.4	Are non-conforming items identified and properly marked to prevent inadvertent shipment?			

PLANT _____ EVALUATOR _____ DATE _____

ITEM NO.	REQUIREMENT	QA MANUAL REFERENCE	S, X, or NA	COMMENTS
15.0	NON-CONFORMING MATERIALS, PARTS, OR COMPONENTS.			
15.1	Are there procedures for identifying, controlling and dispositioning of non-conforming material?			
15.2	Do these procedures control materials, parts, or components which do not conform to requirements in order to prevent their inadvertent use or shipment?			
15.3	Is the responsibility and authority for disposition of non-conforming items defined in the Q.A. Manual or procedures.			
15.4	Have affected personnel been trained in non-conformance procedures?			
15.5	Do inspection records indicate non-conforming material?			
15.6	Is non-conforming material controlled by marking or segregating until disposition is made?			

PLANT _____ EVALUATOR _____ DATE _____

ITEM NO.	REQUIREMENT	QA MANUAL REFERENCE	S,X, or NA	COMMENTS
15.0	NONCONFORMING MATERIALS, PARTS OR COMPONENTS(Cont'd)			
15.7	Are non-conforming items reviewed and accepted, rejected, repaired or reworked in accordance with documented procedures?			
15.8	Are there provisions to control further processing, delivery or use of a non-conforming item pending decision on disposition?			
15.9	Does the system require documentation verifying the acceptability of non-conforming items which have the disposition of "repair" or "use as is"?			
15.10	Are materials that are reworked or repaired to an approved variation inspected to determine compliance with disposition?			
15.11	Are customer approved as-built (reworked, repaired or accepted as is) variations documented?			

PLANT_____ EVALUATOR_____ DATE_____

ITEM NO.	REQUIREMENT	QA MANUAL REFERENCE	S,X, or NA	COMMENTS
15.0	NON-CONFORMING MATERIALS PARTS OR COMPONENTS (CONT'D)			
15.12	Are non-conformance categories which are to be reported to the purchaser clearly defined?			
15.13	Does the program define the level of authority for resolving non-conforming items?			
15.14	Are non-conformance reports or summaries regularly reviewed by responsible management?			

PLANT_____ EVALUATOR_____ DATE_____

ITEM NO.	REQUIREMENT	QA MANUAL REFERENCE	S,X, or NA	COMMENTS
16.0	CORRECTIVE ACTION			
16.1	Does the system assure conditions adverse to quality are promptly identified and corrected?			
16.2	Are there provisions for analysis and evaluation to determine the cause of the significant conditions adverse to quality?			
16.3	Are there provisions for reporting significant conditions adverse to quality to management and has management approved the corrective action taken?			
16.4	Has implementation of corrective action been verified by the responsible party?			

PLANT_____ EVALUATOR_____ DATE_____

ITEM NO.	REQUIREMENT	QA MANUAL REFERENCE	S,X, or NA	COMMENTS
17.0	QUALITY ASSURANCE RECORDS			
17.1	Are the records to be maintained clearly defined in writing, identifiable and retrievable?			
17.2	Are tracability records maintained?			
17.3	Are records maintained of N.D.E. reports?			
17.4	Are records kept of all inspections?			
17.5	Are the records maintained, and if required, are duplicate records maintained in another location?			
17.6	Is there a system for submittal of records to the customer if required?			

PLANT_____ EVALUATOR_____ DATE_____

ITEM NO.	REQUIREMENT	QA MANUAL REFERENCE	S,X, or NA	COMMENTS
18.0	AUDITS			
18.1	Are planned and documented internal audits carried out to verify compliance with the Quality Assurance Program?			
18.2	Are the audits performed in accordance with written procedures or check list, by trained personnel not having responsibility in the areas being audited?			
18.3	Are audit results documented and reviewed by management having responsibility in the area audited?			
18.4	Does responsible management take necessary action to correct deficiencies revealed by the audit?			
18.5	Are audit frequencies specified?			

PLANT_____ EVALUATOR_____ DATE_____

ITEM NO.	REQUIREMENT	QA MANUAL REFERENCE	S,X, or NA	COMMENTS
18.0	AUDITS (Cont'd)			
18.6	Are deficient areas re-audited until corrections have been made and has this been documented?			
18.7	Are Audits conducted when one or more of the following conditions exist: 1. When sufficient time has elapsed after award of contract to allow implementation of Quality Assurance Program and it is appropriate to evaluate Quality Assurance Program for compliance to program description and requirement? 2. When significant changes are made in functional areas of Quality Assurance Program, including reorganization? 3. When it is suspected that safety, performance, or reliability of the item is in jeopardy due to deficiencies and nonconformance in the Quality Assurance Program.			

PLANT _____ EVALUATOR _____ DATE _____

ITEM NO.	REQUIREMENT	QA MANUAL REFERENCE	S,X, or NA	COMMENTS
18.0	AUDITS (Cont'd) Are Audits conducted when one or more of the following conditions exist? (Cont'd) 4. When a systematic, independent assessment of program effectiveness or item quality or both is considered necessary? 5. When it is necessary to verify implementation of required corrective action?			

PLANT _____ EVALUATOR _____ DATE _____

AMERICAN INSTITUTE OF STEEL CONSTRUCTION

QUALITY CERTIFICATION PROGRAM

INSPECTION - EVALUATION REPORT

CATEGORY: NUCLEAR SUPPLEMENT

Check One

Initial Certification
Renewal (2nd or 3rd year)
Renewal (1st year of new cycle)

Fabricator: _____

Audited By: _____ Date: _____

Street Address: _____ City/State: _____ Zip: _____

Persons Contact:

Name: 1. _____ 3. _____ 5. _____

Title: _____

Name: 1. _____ 4. _____ 6. _____

Title: _____

Certification recommended

Certificaton not recommended

If not recommended, indicate reason(s): _____

_____

_____

Signed _____

Date _____