



SOUTHERN CALIFORNIA  
**EDISON**

An *EDISON INTERNATIONAL* Company

# QUALITY INSPECTION SERVICES

# QUALITY MANUAL

REVISION 9

Approved Signature on File  
Quality Inspection Services Manager

Date 05/15/2009

Approved Signature on File  
Manager of SSID

Date 05/15/2009

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# QUALITY POLICY

Our commitment is to understand and satisfy our customer needs and expectations. Our goal is to enhance customer satisfaction in order to develop loyal and long-term business relationships. To succeed, we will continuously improve the processes that contribute to our effectiveness, efficiency and productivity in order to deliver, to our customers, value-priced quality products and services.

QIS has developed business and quality objectives that drive our organization and that are continuously evaluated to ensure that both customer and business needs are satisfactorily addressed. The quality management system has been developed to assist management in the implementation of these (business and quality) objectives.

The QIS Department shall comply with, and continually improve the effectiveness of, this quality management system. The quality management system, business objectives and quality objectives are communicated and understood throughout our organization.

Ultimately, the quality of our services lies with each employee. It is the policy of the Quality Inspection Services Department to involve the work force in all aspects of issues related to their work activities. We will strive to stimulate employee's creativity, initiative, and sense of responsibility and to provide an environment that fosters a spirit of "**pride in workmanship and teamwork**" among employees.

We will provide technical and quality awareness training (to enhance personnel competency), approved instructions, proper tools, and the required management involvement to allow the work force to produce the level of quality our customers expect and deserve.

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QUALITY INSPECTION SERVICES  
MANAGER

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MANAGER OF SSID

## STATEMENT OF AUTHORITY

Southern California Edison (SCE) SSID Quality Inspection Services (QIS), identified hereafter as QIS, recognizes the importance of quality in industry and is committed to continuous improvement in the quality of work controlled under this Quality Program. The work scope controlled under the umbrella of this program includes Dimensional Inspection and Geometry Recovery (reverse engineering) activities issued through Edison ESI. The requirements of this program do not apply to the inspections, examinations, and tests performed on equipment and material issued through sources other than Edison ESI, or processed through another business unit.

This manual has been prepared to document the processes that control activities affecting quality and contractual agreements between the customer and QIS.

This program meets the requirements of ISO 9001:2000.

Contractual arrangements between the customer and QIS which specify requirements in addition to those specified by this quality system, shall be applied providing such requirements do not compromise the quality of our service or this quality system.

## Section 4 – Quality Management System

### 4.1 General Requirements

4.1.1 The Quality Inspection Services (QIS) Department shall establish, document, implement and maintain a quality management system, for continually improving product, process and the quality management system effectiveness, in accordance with ISO 9001: 2000.

4.1.2 QIS shall:

1. Identify the processes needed for the quality management system and their application throughout the organization;
2. Determine the sequence and interaction of these processes;
3. Determine criteria and methods needed to ensure that both the operation and control of these processes are effective;
4. Ensure the availability of resources and information necessary to support the operation and monitoring of these processes;
5. Monitor, measure and analyze these processes; and
6. Implement actions necessary to achieve planned results and continual improvement of these processes.

4.1.3 When QIS chooses to outsource any process that affects product conformity with requirements, QIS shall ensure control over such processes. Control of such outsourced processes shall be identified within the quality management system.

*This is accomplished by:*

- Quality Manual;
- QCDP-008, “Quality Inspection Services Administrative Processes;”
- QCDP-011, “Procurement;” and
- QCDP-012, “Continuous Process Improvement.”

### 4.2 Documentation Requirements

4.2.1 QIS’ quality management documentation system shall include:

- .1 Documented statements of a quality policy and quality objectives;
- .2 A quality manual;
- .3 Documented procedures required by ISO 9001: 2000;
- .4 Documents needed by QIS to ensure the effective planning, operation and control of processes; and
- .5 Quality records required by ISO 9001: 2000.

*This is accomplished by:*

- Quality Manual;
- QCDP-007, “Process Controls for Dimensional Inspection Laboratory;”
- QCDP-008, “Quality Inspection Services Administrative Processes;”
- QCDP-010, “Quality Records;”
- QCDP-012, “Continuous Process Improvement;”

- QAP-008, “Corrective Action;” and
- QAP-017, “Audits and Surveillances.”

### 4.3 Quality Manual

4.3.1 QIS has developed and maintained a quality manual that includes:

- .1 The scope of the quality management system, including details of and justification for any exclusions;
- .2 Documented procedures established for the quality management system, or reference to them; and
- .3 A description of the interaction between processes of the quality management system.

4.3.2 The following exclusions are taken:

- .1 **Design Control** activities are not applicable to dimensional inspection and geometry recovery (reverse engineering) activities in the QIS Department. Work scope activities requiring design control features will be sub-contracted to qualified suppliers and controlled using approved Project Quality Plans.
- .2 **Manufacturing** activities are not applicable to dimensional inspection and geometry recovery (reverse engineering) activities in the QIS Department. Work scope activities requiring manufacturing will be sub-contracted to qualified suppliers and controlled using approved Project Quality Plans.

*This is accomplished by:*

- Quality Manual;
- QCDP-004, “Contract Review, Acceptance and Order Release;” and
- QCDP-015, “Supplier Qualification.”

### 4.4 Control of Documents

4.4.1 QIS shall develop and control documents that are required by the quality management system.

4.4.2 Documented procedures define the controls needed:

- .1 To approve documents for adequacy prior to issue;
- .2 To review and update as necessary, and re-approve documents;
- .3 To ensure that changes and the current revision status of documents are identified;
- .4 To ensure that relevant versions of applicable documents are available at points of use;
- .5 To ensure that documents remain legible and readily identifiable;
- .6 To ensure that documents of external origin are identified and their distribution controlled; and
- .7 To prevent the unintended use of obsolete documents, and to apply suitable identification to them if they are retained for any purpose.

*This is accomplished by:*

- QCDDP-008, “Quality Inspection Services Administrative Processes;”
- QAP-002, “Procedures;” and
- QAP-006, “Document Control.”

#### **4.5 Control of Quality Records**

- 4.5.1 QIS has established and controlled quality records for the purpose of providing evidence of conformity to requirements.
- 4.5.2 Quality records shall remain legible, be readily identifiable, and be retrievable.
- 4.5.3 Procedures have been established to define controls for identification, storage, protection, retrieval, retention time and disposition of quality records.

*This is accomplished by:*

- QCDDP-010, “Quality Records” and
- QAP-007, “Quality Assurance Department Records.”

## Section 5 – Management Responsibility

### 5.1 Management Commitment

5.1.1 Top management shall provide evidence of commitment to development and continual improvement of the quality system by:

- .1 Communicating to the organization the importance of meeting customer, statutory, and legal requirements;
- .2 Establishing a quality policy;
- .3 Establishing business unit quality objectives;
- .4 Conducting annual management reviews; and
- .5 Ensuring the availability of resources.

*This is accomplished by:*

- QCDP-008, “Quality Inspection Services Administrative Processes;”
- QCDP-012, “Continuous Process Improvement;”
- Communication and training of personnel on customer and regulatory requirements;
- Quality Policy; and
- QIS business and quality objectives.

### 5.2 Customer Focus

5.2.1 Top management shall ensure that customer needs and expectations are determined, and are met with the aim of enhancing customer satisfaction.

*This is accomplished by:*

- Quality Policy;
- QCDP-004, “Contract Review, Acceptance and Order Release.”

### 5.3 Quality Policy

5.3.1 Top management shall ensure that the Quality Policy:

- .1 Is appropriate to QIS’ services and business objectives;
- .2 Includes a commitment to comply with requirements and continually improve the effectiveness of the quality management system;
- .3 Provides a framework for quality objectives establishment and review;
- .4 Is communicated and understood within QIS; and
- .5 Is reviewed for continuing suitability.

*This is accomplished by:*

- Quality Policy; and
- QCDP-008, “Quality Inspection Services Administrative Processes.”

### 5.4 Planning

5.4.1 Top management shall ensure that Quality Objectives, including those needed to meet requirements for product, are established at relevant functions and levels within the

organization. The Quality Objectives shall be measurable and consistent with the Quality Policy.

***This is accomplished by:***

- Business Objectives; and
- Quality Objectives.

#### 5.4.2 Quality Management System Planning

- .1 Top management shall ensure that the planning of the quality management system is carried out in order to meet the requirements of ISO 9001: 2000 and QIS quality objectives.
- .2 Top management shall ensure that changes are conducted in a controlled manner and that the integrity of the quality management system is maintained during this change.

***This is accomplished by:***

- Management approval of the quality management system (Quality Manual and implementing procedures);
- Quality Manual; and
- Implementing Procedures.

### 5.5 Responsibility, Authority and Communication

#### 5.5.1 Responsibility and Authority

- .1 Functions and interrelationships including responsibilities and authorities are defined and have been communicated to all personnel affecting this quality management system.

***This is accomplished by:***

- QCDP-008, “Quality Inspection Services Administrative Processes;” and
- Implementing Procedures.

#### 5.5.2 Management Representative

- .1 The Management Representative has been appointed by the Manager of SSID and has been given the responsibility and authority to: ensure processes are established, implemented and maintained; report to top management on the performance of the quality management system; to report on the needs for improvement; and, to promote awareness of customer requirements.

***This is accomplished by:***

- QCDP-008, “Quality Inspection Services Administrative Processes.”

#### 5.5.3 Internal Communication

- .1 Top management shall ensure that effective communication between various levels and functions regarding the processes of the quality management system and its effectiveness is maintained.

***This is accomplished by:***

- Monthly staff meetings.

## 5.6 Management Review

### 5.6.1 General

Top management reviews the quality management system at least once a year to ensure its continuing suitability, adequacy and effectiveness. This review shall evaluate the need for changes including the quality policy, business objectives and quality objectives and assess opportunities for improvement.

***This is accomplished by:***

- QCDP-008, “Quality Inspection Services Administrative Processes.”

### 5.6.2 Review Input

The input to the management review shall include information on:

- .1 Audit results;
- .2 Customer feedback;
- .3 Process performance;
- .4 Product conformance;
- .5 Status of corrective and preventive actions;
- .6 Previous management review follow-up;
- .7 Quality management review system changes;
- .8 Recommendations for improvement/continual improvement; and,
- .9 Training needs.

***This is accomplished by:***

- QCDP-008, “Quality Inspection Services Administrative Processes.”

### 5.6.3 Review Output

The output from the management review shall include, as a minimum, any decisions and actions related to:

- .1 Improvement of quality system effectiveness;
- .2 Improvement of processes effectiveness;
- .3 Improvement of product related to customer requirements;
- .4 Resource needs; and
- .5 Customer satisfaction.

### 5.6.4 Records of the management review (input/output) shall be maintained in accordance with approved procedures.

***This is accomplished by:***

- QCDP-008, “Quality Inspection Services Administrative Processes” and
- QCDP-010, “Quality Records.”

## Section 6 – Resource Management

### 6.1 Provision of Resources

6.1.1 QIS has determined and provides resources needed to:

- .1 Implement and maintain the quality management system processes;
- .2 Continually improve effectiveness of the quality management system; and
- .3 Enhance customer satisfaction.

*This is accomplished by:*

- Quality Policy;
- Management Review; and
- QIS Department Budget.

### 6.2 Human Resources

6.2.1 General

- .1 Personnel performing work affecting product quality shall be competent on the basis of appropriate education, training, skills and experience.

*This is accomplished by:*

- QCDP-006, “Qualification and Training of QIS Personnel.”

6.2.2 Competence Awareness and Training

- .1 QIS shall determine the necessary competence for personnel performing work affecting product quality.
- .2 QIS shall provide training or take other actions to satisfy personnel training needs.
- .3 QIS shall evaluate the effectiveness of actions taken.
- .4 QIS shall ensure that personnel understand the relevance and importance of their activities and how they contribute to the achievement of the quality objectives.
- .5 QIS shall maintain appropriate records of education, training and experience in accordance with approved procedures.

*This is accomplished by:*

- QCDP-006, “Qualification and Training of QIS Personnel;”
- QCDP-010, “Quality Records;”
- QIS Manager review of completed work packages;
- Customer Satisfaction; and
- Employee Performance Evaluations.

### 6.3 Infrastructure

6.3.1 To achieve conformity of product, QIS shall identify, provide and maintain facilities including:

- .1 Building, workspace and associated facilities;
- .2 Equipment, hardware and software; and

.3 Support Services.

*This is accomplished by:*

- QCDP-007, “Process Controls for Dimensional Inspection Laboratory.”

## 6.4 Work Environment

6.4.1 To achieve conformity of product, QIS manages human and physical factors of the work environment.

*This is accomplished by:*

- QCDP-007, “Process Controls for Dimensional Inspection Laboratory;”
- Corporate Safety Procedures;
- Management Review of future facilities and equipment needs; and
- Internal audit.

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## Section 7 – Product Realization

### 7.1 Planning of Product Realization

- 7.1.1 To achieve product realization, QIS shall plan required sequences of processes and sub-processes that are consistent with this quality management system and are suitably documented for our method of operation.
- 7.1.2 In planning product realization, QIS shall determine:
- .1 Quality objectives and requirements for the job;
  - .2 The processes, documentation and resources specific to the job;
  - .3 Inspection activities and criteria for acceptability; and
  - .4 Records necessary to provide confidence of conformity of the processes and resulting product.

***This is accomplished by:***

- QCDD-004, “Contract Review, Acceptance and Order Release;”
- QCDD-007, “Process Controls for Dimensional Inspection Laboratory;” and
- QCDD-010, “Quality Records.”

### 7.2 Customer-Related Processes

- 7.2.1 QIS shall determination customer requirements including:

- .1 Customer specified product requirements;
- .2 Availability, delivery and support requirements;
- .3 Product requirements other than customer specified that are necessary for intended/specified use, when applicable;
- .4 Obligations related to product, including regulatory and statutory requirements; and
- .5 Any additional requirements identified by QIS.

***This is accomplished by:***

- QCDD-004, “Contract Review, Acceptance and Order Release” and
- Corporate commitments to state and federal regulations.

- 7.2.2 Review of Requirements Related to the Product

- .1 QIS shall perform a review of customer requirements prior to commitment to supply products. This review shall ensure that product requirements are defined, procurement document requirements differing from those previously expressed are resolved, and that QIS has the ability to meet the defined requirements.
- .2 Where customer provides no documented statement of requirement, the customer requirements shall be confirmed by QIS before acceptance.
- .3 When product requirements are changed, QIS shall ensure that relevant documents are amended and that QIS personnel are made aware of changes.
- .4 Records of the results of these reviews shall be maintained in accordance with approved procedures.

***This is accomplished by:***

- QCDP-004, ‘Contract Review, Acceptance and Order Release’ and
- QCDP-010, ‘Quality Records.’

**7.2.3 Customer Communication**

- .1 QIS has identified and implemented arrangements for customer communications relating to product information, inquiries, contracts or order handling, including amendments and customer feedback and customer complaints.

***This is accomplished by:***

- QCDP-004, ‘Contract Review, Acceptance and Order Release;’ and
- QCDP-008, ‘Quality Inspection Services Administrative Processes.’

**7.3 Design and Development**

- 7.3.1 QIS provides dimensional inspection and geometry recovery (reverse engineering) services to our customers. Design and development activities are not performed by QIS.

- 7.3.2 The potential exists that a customer may require QIS to provide a product/service that includes more than the typical data acquisition or geometry recovery service provided by QIS. Should this occur, QIS will be required to prepare a Project Quality Plan to define the specific activity and will sub-contract the activity to qualified suppliers identified on the Approved Suppliers List.

***This is accomplished by:***

- QCDP-004, ‘Contract Review, acceptance and Order Release;’
- QCDP-010, ‘Quality Records;’
- QCDP-011, ‘Procurement;’
- QAP-014, ‘Procurement;’ and
- QAP-015, ‘Supplier Qualification.’

**7.4 Purchasing****7.4.1 Purchasing Process**

- .1 QIS shall ensure that purchased products conform to procurement requirements. The type and extent of control shall be dependent upon the effect on subsequent realization processes or the final product.
- .2 QIS evaluates and selects suppliers based on their ability to supply product in accordance with QIS requirements. QIS has defined criteria for selection and periodic evaluation and re-evaluation. Records of acceptable subcontractors shall be maintained in accordance with documented procedures.
- .3 Business units within SSID that have an established quality program can provide services to QIS without placement on the Approved Suppliers List.

***This is accomplished by:***

- QCDP-010, ‘Quality Records;’
- QCDP-011, ‘Procurement;’
- QAP-014, ‘Procurement;’ and
- QAP-015, ‘Supplier Qualification.’

#### 7.4.2 Purchasing Information

- .1 QIS procurement documents shall describe the product to be purchased, including where appropriate: requirements for approval of product; procedures; processes and equipment; requirements for personnel qualification; and, quality management system requirements.
- .2 QIS shall ensure that procurement requirements are correct prior to submittal to the supplier.

***This is accomplished by:***

- QCDDP-011, "Procurement" and
- QAP-014, "Procurement."

#### 7.4.3 Verification of Purchased Product

- .1 When source surveillance is employed as the method of product verification and release, the Material Service Request form shall identify specific requirements to the supplier.
- .2 When specified by contract, code or federal regulations, customers shall be afforded the right to verify that product conforms to specified procurement requirements at our supplier's facilities. When customer verification occurs, the QIS department shall retain the responsibility for product conformance and release.

***This is accomplished by:***

- QCDDP-002, "Source Verification;"
- QCDDP-011, "Procurement;" and
- QAP-014, "Procurement."

### 7.5 Production and Service Provision

#### 7.5.1 Control of Production and Service Provision

QIS shall plan and control production and service operations under controlled conditions through, as applicable:

- .1 The availability of information that specifies the characteristics of the product;
- .2 The availability of work instructions;
- .3 The use of suitable equipment for production and service operations;
- .4 The availability and use of measuring and monitoring devices;
- .5 The implementation of monitoring and measurement; and
- .6 The implementation of release, delivery and applicable post-delivery activities.

***This is accomplished by:***

- QCDDP-007, "Process Controls for Dimensional Inspection Laboratory;"
- QCDDP-009, "QIS Measuring and Test Equipment;" and
- QCDDP-012, "Continuous Process Improvement"

#### 7.5.2 Validation of Processes for Production and Service Provision

- .1 QIS provides reverse engineering and dimensional recovery services. Measuring and test equipment is calibrated and CMM machines use software that is verified and

validated prior to initial use. All inspection personnel are qualified as competent to perform assigned tasks. There are no production or service processes whose output cannot be verified by subsequent monitoring or measurement.

***This is accomplished by:***

- QCDP-004, “Contract Review, Acceptance and Order Release” and
- QCDP-007, “Process Controls for Dimensional Inspection Laboratory.”

### 7.5.3 Identification and Traceability

- .1 QIS shall identify the product by suitable means throughout production and service operations and shall maintain the status of the product with respect to measurement and monitoring requirements.
- .2 When traceability is a requirement, QIS shall control and record the unique identification of the product.

***This is accomplished by:***

- QCDP-004, “Contract Review, Acceptance and Order Release;”
- QCDP-007, “Process Controls for Dimensional Inspection Laboratory;” and
- QCDP-009, “QIS Measuring and Test Equipment.”

### 7.5.4 Customer Property

- .1 QIS shall exercise care with customer property while it is under the control of, or being used by, QIS. QIS shall verify, protect and maintain customer property provided for use or incorporation into the product.
- .2 If any customer property is lost, damaged or otherwise found to be unsuitable for use, the occurrence shall be recorded and reported to the customer.

***This is accomplished by:***

- QCDP-007, “Process Controls for Dimensional Inspection Laboratory.”

### 7.5.5 Preservation of Product

- .1 QIS shall preserve conformity of product and constituent parts with customer requirements, during internal processing and delivery to the intended destination. This preservation shall include identification, handling, packaging, storage, protection and preservation.

***This is accomplished by:***

- QCDP-007, “Process Controls for Dimensional Inspection Laboratory.”

## 7.6 Control of Measuring and Monitoring Devices

- 7.6.1 Measuring and test equipment (M&TE) shall be controlled, calibrated, and adjusted at specified intervals to maintain accuracy within necessary limits.
- 7.6.2 M&TE shall be of proper type, range, accuracy, and tolerance to determine conformance of an item to the specified requirements.
- 7.6.3 Use of M&TE for dimensional inspection and reverse engineering activities shall be documented on the job traveler for traceability to the customer equipment inspected.
- 7.6.4 Measuring and monitoring devices.

- .1 Calibration shall be performed in accordance with approved procedures or instructions using standards traceable to NIST or other national laboratories with which NIST has appropriate measurement agreements. Where such standards do not exist, calibration shall be performed to meet the manufacturer's recommended specifications or the basis for calibration shall be documented.
  - .2 Calibration and adjustment shall be performed at prescribed intervals or prior to use.
  - .3 Initial and subsequent calibrations shall be documented.
  - .4 Calibration may be performed by Edison Metrology or an approved supplier.
  - .5 Calibration stickers shall identify the standard device by identification number, calibration date, and next due date, and shall be affixed to the device.
  - .6 Calibration records shall be traceable to the device and shall be maintained.
  - .7 Standards shall be stored to prevent damage; preserve the physical condition; and maintain the accuracy of the device.
  - .8 The user shall evaluate tests performed with standards found to be out of calibration as appropriate. The evaluation shall be documented and shall determine the validity of inspections performed subsequent to the last valid calibration of the device.
  - .9 Environmental conditions shall be defined and be suitable for the calibrations and measurements being performed.
  - .10 Handling, preservation and storage requirements shall assure that the accuracy and fitness of measuring and test equipment are maintained.
  - .11 Equipment safeguards shall be identified and implemented.
- 7.6.5 Test Software is verified to satisfy its intended application and is maintained in accordance with documented procedures.

***This is accomplished by:***

- QCDD-008, "Quality Inspection Services Administrative Processes;"
- QCDD-009, "QIS Measuring and Test Equipment;" and
- QCDD-011, "Procurement."

## Section 8 – Measurement, Analysis and Improvement

### 8.1 General

- 8.1.1 QIS shall plan and implement measurement, monitoring, analysis and improvement processes needed to demonstrate conformity of the product, ensure conformity of the quality management system and to continually improve the effectiveness of the quality management system.
- 8.1.2 Statistical process controls are not applicable to the services provided by QIS.

*This is accomplished by:*

- QCDDP-008, “Quality Inspection Services Administrative Processes;”
- QCDDP-009, “QIS Measuring and Test Equipment;” and
- QCDDP-012, “Continuous Process Improvement.”

### 8.2 Monitoring and Measurement

#### 8.2.1 Customer Satisfaction

- .1 QIS shall determine methodologies of obtaining information for monitoring customer satisfaction as one of the measurements of performance of the quality management system. QIS has a customer satisfaction program that measures customer perception and customer satisfaction.

*This is accomplished by:*

- QCDDP-008, “Quality Inspection Services Administrative Processes;” and
- QCDDP-012, “Continuous Process Improvement.”

#### 8.2.2 Internal Audit

- .1 QA shall plan and conduct internal audits periodically to determine whether the quality management system conforms to the requirements of ISO 9001: 2000, conforms to the quality program defined in this manual, and has been effectively implemented and maintained.
- .2 This audit program shall be planned, taking into consideration the status and importance of the activities and areas to be audited as well as the results of previous audits, corrective action reports and customer complaints.
- .3 The audit criteria, scope, frequency and methodologies shall be defined.
- .4 Selection of auditors and the conduct of audits shall ensure objectivity and impartiality of the audit process. Auditors shall not audit their own work.
- .5 The responsibilities and requirements for planning and conducting audits, for reporting results and for maintaining records has been defined in implementing procedures.
- .6 Management responsible for the area audited shall ensure that actions are taken without undue delay to eliminate detected nonconformity and their causes and that timely corrective action is taken on deficiencies found during the audit.
- .7 Follow-up audit activities shall verify and record the implementation and effectiveness of the corrective action taken.

- .8 Records of all audits and associated corrective actions shall be maintained as required in documented procedures.

***This is accomplished by:***

- QAP-007, “Quality Records” and
- QAP-017, “Audits and Surveillances.”

### 8.2.3 Monitoring and Measurement of Processes

- .1 QIS shall apply suitable methods for measurement and monitoring of the Quality Management System processes. These methods shall demonstrate ability of the processes to achieve planned results. When results are not achieved, corrective or preventive action shall be taken.

***This is accomplished by:***

- Quality Objectives;
- QCDDP-012, “Continuous Process Improvement;”
- QAP-007, “Quality Assurance Department Records;” and
- QAP-008, “Corrective Action.”

### 8.2.4 Monitoring and Measurement of Product

- .1 QIS, at appropriate stages of the product realization, shall measure and monitor the characteristics of the product to verify that requirements for the product are met. Evidence of conformity shall include documented acceptance criteria and records that indicate the authority responsible for release of product.
- .2 Product release and service delivery shall not proceed until all specified activities have been satisfactorily completed or otherwise approved by management or the customer.

***This is accomplished by:***

- QCDDP-007, “Process Controls for Dimensional Inspection Laboratory.”

## 8.3 Control of Nonconforming Product

- 8.3.1 QIS shall ensure that product which does not conform to product requirements is identified and controlled to prevent unintended use or delivery. The controls and related responsibilities and authorities for dealing with nonconforming product is defined in implementing procedures.

- 8.3.2 Nonconforming product is dealt with in the following methods:

- .1 Taking action to eliminate the detected nonconformity;
- .2 Authorizing its use, release or acceptance under concession by relevant authority and where applicable by the customer;
- .3 By taking action to preclude its original intended use or application; or
- .4 When nonconforming product is corrected, it shall be subject to re-verification to demonstrate conformity to requirements.

- 8.3.3 Records shall include:

- .1 Nature of nonconformities;

- .2 Subsequent actions taken; and
  - .3 Concession obtained.
- 8.3.4 When nonconforming product is detected after delivery or use has started, QIS shall take actions appropriate to the effects or potential affects, of the nonconformity.

***This is accomplished by:***

- QCDP-007, “Process Controls for Dimensional Inspection Laboratory;”
- QCDP-008, “Quality Inspection Services Administrative Processes;”
- QCDP-009, “QIS Measuring and Test Equipment;” and
- QAP-008, “Corrective Action.”

## 8.4 Analysis of Data

- 8.4.1 QIS shall determine the suitability and effectiveness of the quality management system and identify continual improvement opportunities that can be made by collecting and analyzing appropriate data to provide information on:

- .1 Customer satisfaction;
- .2 Conformance to product requirements;
- .3 Characteristics of processes, product and their trends involving opportunities for preventive action; and
- .4 Suppliers.

- 8.4.2 Analysis shall include data from results of monitoring and measurement and from other relevant source.

***This is accomplished by:***

- QCDP-008, “Quality Inspection Services Administrative Processes;” and
- QCDP-012, “Continuous Process Improvement.”

## 8.5 Improvement

- 8.5.1 Continual Improvement

- .1 QIS shall plan and manage the processes necessary for the continual improvement of the quality management system. Facilitation of continual improvement of the quality management system is to include the use of the Quality Policy, quality objectives, audit results, analysis of data, corrective and preventive action and the Management Review.

***This is accomplished by:***

- Quality Objectives;
- Customer Feedback Log;
- QCDP-008, “Quality Inspection Services Administrative Processes;”
- QCDP-012, “Continuous Process Improvement;” and
- DP-008, “Process Assessment Review.”

- 8.5.2 Corrective Action

- .1 QIS shall take corrective action to eliminate the cause of nonconformities in order to prevent recurrence. Corrective actions shall be appropriate to the effects of the problems encountered.

#### 8.5.3 Implementing procedures define requirements to:

- .1 Review nonconformities (including customer complaints);
- .2 Determine the causes of nonconformity;
- .3 Evaluate the need for actions to ensure that nonconformities do not recur;
- .4 Determine and implement action needed;
- .5 Define records to be maintained for results of actions taken; and
- .6 Review corrective action taken.

***This is accomplished by:***

- QCDD-007, "Process Controls for Dimensional Inspection Laboratory;"
- QCDD-008, "Quality Inspection Services Administrative Processes;"
- QAP-008, "Corrective Action."

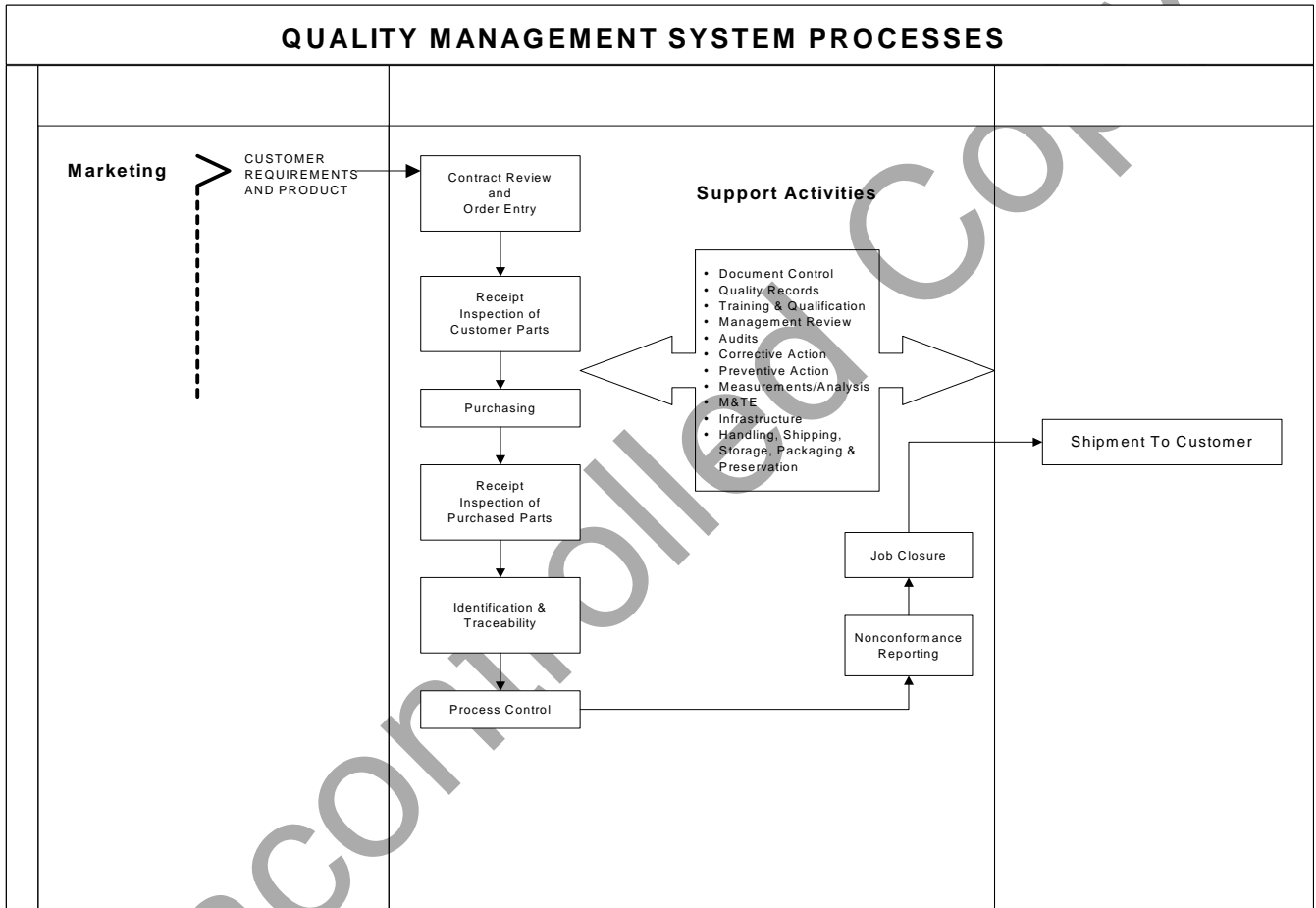
#### 8.5.4 Preventive Action

- .1 QIS shall document a procedure for identifying Preventive Action to eliminate the causes of potential nonconformities and prevent occurrences. Preventive Action shall be appropriate to the impact of potential problems and define requirements for identifying potential nonconformities and their causes, evaluating the need for action to ensure that nonconformities do not recur, determining and implementing action needed, recording results of action taken and reviewing preventive actions taken.

***This is accomplished by:***

- QCDD-012, "Continuous Process Improvement" and
- QAP-008, "Corrective Action."

QIS Process Relationship  
Figure 1



These processes comprise the quality management system and are defined in implementing procedures. These processes are understood and implemented throughout the QIS Department.