

SUPPLIER QUALITY PROGRAM, V (U)

CHANGE HISTORY

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1. PURPOSE

This document defines the minimum Supplier Quality System requirements for products designated as requiring the Supplier Quality Program V level of control when imposed by the Buyer.

This document is owned and used by Honeywell Federal Manufacturing and Technologies (FM&T). The requirements defined within this document are applicable to products and services procured for FM&T or Sandia. This document is also used by Sandia National Laboratories (SNL).

INCORPORATION GUIDANCE

Revision **"W"** is effective on 8/1/2019.

2. ORDER OF PRECEDENCE

The order of precedence of documents that set out the product requirements imposed upon and agreed to by the Supplier and which are incorporated in the purchase order is listed below. All of these items may or may not be included in any single purchase order.

A. Purchase Order(PO)/Statement of Work(SOW)

Note: Where PO is specified within this document, SOW can be substituted, where appropriate.

B. Product drawings and specifications, i.e., those documents that define the requirements for the product to be furnished

C. Federal, military, industrial or technical society material/process specifications and standards

D. Product data forms

E. Equipment manufacturers operating procedures

3. DEFINITIONS AND REFERENCE DOCUMENTS

The list of definitions of terms relating to this document is included in the Appendix.

4. BUYER'S QUALITY OVERSIGHT

A. AUDITS, SURVEYS AND INSPECTIONS

The Buyer and/or its Customer, National Nuclear Security Administration (NNSA), reserve the right to perform quality system audits, quality assurance surveys and verification inspections at Supplier locations to evaluate the degree of compliance with this document and the purchase order. This includes access to a Sub-Supplier's facility, instructions, procedures, specifications and records as deemed necessary to conduct such audits, surveys and inspections. The results must not relieve the Supplier of the responsibility to supply conforming product to the Buyer.

Disapproval of the Supplier's quality program or major portions thereof may be cause for withholding Buyer acceptance of product until cause(s), specific corrective action(s) and preventive corrective action(s) are submitted to and approved by the Buyer. If significant conditions adverse to Quality are identified, these conditions must be resolved prior to continuing work. When requested, the Supplier must arrange permission for the Buyer and/or the NNSA to perform any audits, surveys and inspections at its Sub-contractors.

Note: The Buyer will coordinate visits and establish dates for visits that are mutually satisfactory to all parties.

B. SUPPLIER'S PROPRIETARY RIGHTS

In cases where the Supplier or the Supplier's Sub-contractor(s) reserve certain proprietary rights of controlled documents, hardware, processes, records, etc., the Supplier must submit a written list of such items to the Buyer with their quote. The Supplier or Supplier's Sub-contractor(s) will provide their best effort to fulfill the requirements of the audit without divulging any Supplier related proprietary information.

C. RESIDENT REPRESENTATIVES

The Buyer and/or NNSA may station resident quality representative(s) at the Supplier's facility during the term of the purchase order as outlined in the Purchase Order and as mutually agreed by all parties. The Supplier must provide all reasonable facilities and assistance for the safety and convenience of the representatives of the Buyer and/or NNSA in the performance of their duties.

5. REQUIREMENTS OF THE SUPPLIER'S QUALITY PROGRAM

A. GENERAL

The Supplier's quality program must demonstrate recognition of the Buyer's requirements in order to assure conformance of product requirements. In the event the Supplier operates as a sales office, the product manufacturer must also meet the requirements of this document and the purchase order requirements.

All work performed under Buyer Purchase Orders will be performed within the scope of the Supplier's quality program. The Buyer reserves the right to conduct final inspection and/or testing of the Supplier's product to assure conformance with the requirements.

The Supplier's Quality System must conform to the requirements specified on the Purchase Order and outlined in this document. Any changes to the Supplier's Quality System that could affect conformity of the product must be submitted to the Buyer for approval prior to shipment of the product.

B. QUALIFICATION FOR THE BUYER'S APPROVED SUPPLIER LIST

Suppliers must furnish a copy of their quality manual or equivalent to the Buyer prior to surveys for qualification or requalification.

1. INITIAL SURVEYS

An initial survey must be conducted by authorized Buyer audit personnel to the requirements specified in the latest revision of this document, and the Buyer's Purchase Order requirements. Suppliers gain approved status upon completion of the survey and closure of any related findings.

2. RE-APPROVAL

Re-approval will be at the Buyers discretion, normally at 3-year intervals. Re-approval will be to the latest revision of this document as communicated to the Supplier by the Buyer.

The Buyer will monitor and review the Supplier's performance. Poor performance, supplier change of ownership, supplier relocation, or significant changes to the supplier's quality manual may result in a Re-Approval survey to the requirements outlined in this document or Buyer Purchase Order requirements.

6. BUYER SPECIFIC REQUIREMENTS

A. CONTRACT REVIEW

The Supplier must have a written procedure(s) for reviewing Buyer Purchase Order Requirements, including PO changes/modifications, ensuring they are understood, communicated to appropriate organizations within the business and with Sub-Suppliers, where appropriate.

The Supplier must notify the Buyer promptly, in writing, of all changes that may affect fit, form, function, availability or reliability of the product prior to shipment. (Examples include: marking, packaging or packaging method, test requirements or test method, design, material, process, and/or software).

B. QUALITY MANAGEMENT SYSTEM (QMS)

Suppliers must integrate quality into management and work practices such that Buyer requirements are met. Suppliers must:

1. Notify the Buyer, in writing, of significant changes to their QMS;
2. Metrics must be maintained and used to provide objective evidence of performance; and
3. Perform and document an annual management assessment of their QMS.

C. ORGANIZATION

Management must provide evidence of their commitment to the QMS by:

1. Describing in their QMS, the organizational structure, responsibilities, levels of authority, and lines of communication for implementing the QMS;
2. Establishing processes, procedures and policies that ensure Buyer requirements are determined, documented, communicated, and met with the aim of enhancing Buyer satisfaction; and
3. Assigning responsibility to **an individual** with sufficient authority, responsibility, and unrestricted access to all levels of management and staff to ensure
 - a. QMS is implemented and effective;
 - b. Improvement opportunities are identified, communicated, and incorporated;
 - c. Performance, at all organizational levels, is monitored and communicated;
 - d. Nonconformances are managed;
 - e. Corrective actions are managed; and

- f. Personnel verifying quality achievement must not be directly responsible for the work being evaluated.

D. QUALITY IMPROVEMENT

The supplier must document a methodology for achieving improvement, which should include a review of item characteristics, process performance, and other quality-related information and analyze the data to identify items, services, and processes needing improvement.

The supplier must also focus on preventing nonconformance, reducing variability, and building quality into products and processes by utilizing methods to prevent quality issues, including but not limited to, process characterization and mistake-proofing tools.

E. TRAINING

The supplier must have written procedures that ensure:

1. Personnel are trained and/or qualified to be capable and competent prior to performing their assigned work;
2. Personnel are provided continuing training to maintain job proficiency;
3. Evidence of training, qualification, or certification are maintained; and
4. Qualification is based on a combination of factors including education, training, skills, and experience.

F. INSTRUCTIONS, PROCEDURES AND DRAWINGS

1. Work must be prescribed by, and performed in accordance with, approved and controlled written instructions, procedures, drawings, specifications, other documents, or models that include or reference appropriate acceptance criteria for determining that results have been satisfactorily attained.
2. Current instructions, procedures, drawings, specifications, other documents, and models must be available to and used by the personnel performing the work.

G. DOCUMENT CONTROL

A written procedure must be established and maintained to control documents, including models and data. Documents must be prepared, reviewed, approved, issued, used, and revised to prescribe processes, specify requirements, or establish design. The process must ensure:

1. Identification of controlled documents;
2. Identification of individuals responsible for the preparation, review, approval, and distribution of controlled documents;
3. Review of controlled documents for adequacy, completeness, and approval prior to distribution;
4. Correct documents are available;
5. Documents specify an effective date; and
6. Timely release, distribution, and implementation.

H. PROCUREMENT

1. General

Suppliers are responsible to ensure that purchased products and services conform to all Buyer Purchase Order requirements. The supplier must have written procedures to ensure that:

- a. Procurement documents, including contracts, contain correct requirements;
- b. Prospective sub-suppliers are evaluated and selected on the basis of specified criteria, technical capabilities and rigor of their QMS;
- c. Procured items and services must meet the requirements defined in the Buyer's Purchase Order;
- d. The supplier must have an established process for the prevention of Counterfeit Components/Parts from being sold to the Buyer as follows:
 - i. The supplier must provide counterfeit component/parts awareness training to its personnel. The supplier may develop their training program based on counterfeit awareness & detection information available online.
 - ii. The supplier must flow down requirements to their suppliers to reduce the risk of receiving suspect/counterfeit parts.

- iii. If suspect or counterfeit components/parts are identified/received the process must address the containment, evaluation, disposition and disposal of the components/parts.
- iv. Any receipt of suspect or counterfeit components or parts in support of a Buyer's Purchase Order must be reported to the Buyer.

2. Supplier Evaluation, Selection, and Monitoring

- a. The Supplier must select Sub-Suppliers on the basis of assessment of ability to supply product in accordance with requirements, including quality requirements and technical capabilities for the product(s) and service(s) being procured.
- b. Sub-Supplier evaluation and selection must be documented.
- c. Sub-Suppliers must be monitored with regard to the effectiveness of their QMS and the quality of their product.
- d. The Supplier's purchase orders or contracts to Sub-Supplier must provide for NNSA and its contractors to perform quality surveys and inspections at the Sub-Supplier locations where materials or services are rendered.

3. Procurement Documentation

The Supplier's procurement documents must be controlled and identify:

- a. Documentation required;
- b. Requirements for approval and/or qualification of product, processes and equipment, to include requirements to notify the Buyer of subsequent changes and when to obtain re-approval;
- c. Requirements for control of product and equipment;
- d. Requirements for configuration control of Buyer requirements and implementing procedures;
- e. Requirements to notify of nonconforming products or processes prior to shipment;
- f. Requirements for disposition of nonconforming products;
- g. Records to be submitted and/or maintained; and
- h. Record retention and disposition requirements.

4. Certificate of Conformance

A certificate of conformance is required for products, materials and hardware in support of the Buyer's Purchase Order. The certificate must:

- a. Identify the purchased material or equipment and associated procurement document(s);
- b. Identify the specific procurement requirements met by the purchased material or equipment; and
- c. Be signed or otherwise authenticated by a person who is responsible for this function as described in the Supplier's Quality Management System.

5. Acceptance of Procured Items and Materials

The Supplier must have a written procedure to validate work performed by Sub-Suppliers as follows:

- a. If the Supplier and/or Product Manufacturer employs a Sub-Supplier to supply material or services, the Supplier must verify that the material or service meets the Buyer's Purchase Order requirements through inspection.
- b. At least annually, for procurements that support FM&T or Sandia Purchase Orders, verify the validity of each of their supplier's Certificate of Conformance and agreement with the Buyer's requirements through independent testing on a minimum of one (1) part number per Sub-Supplier by any of the following methods.
 - i. Testing can be performed by an independent test house approved by the Supplier, or
 - ii. Testing can be performed internally by the Supplier using capable test equipment, or
 - iii. The Supplier can perform an onsite audit of each Sub-Supplier providing material to verify the validity of that Sub-Supplier's Certificate of Conformance.
- c. In cases involving procurement of services (such as third-party inspection or testing), the Supplier must accept the service by any of the following methods, at least annually.
 - i. Technical verification of the data produced.

- ii. Surveillance and/or audit of the service provided.
- iii. Review of the service provider's documented objective evidence for conformance to the Supplier's Purchase Order and Buyer's document requirements.

Note: The Buyer cannot be considered as an independent test house.

Note: Requirements outlined in paragraph (b) above are not applicable to Commercial (COTS) products, such as, nuts, bolts, screws, resistors, diodes, chemicals, etc. It is also not required for Buyer Furnished Materials.

I. CONTROL OF INSPECTION, MEASURING AND TEST EQUIPMENT

The Supplier must ensure that their Standards and Calibration Program is in agreement with the following:

1. Seller must have a written description of their standards and calibration program.
2. Calibration procedures must be controlled, available, used, and must contain sufficient detail to ensure calibrations are performed properly. Procedures that are obtained from a U.S. Government agency, an equipment manufacturer, or a published standard may be used if none are furnished by the Buyer.
3. Personnel performing calibrations must be trained and technically qualified for the assigned tasks. Records of qualifications must be maintained for all calibration personnel.
4. Calibration devices must be traceable to the National Institute of Standards and Technology (NIST). If the Supplier contracts calibration services, the sub-supplier's calibration device(s) must be traceable to NIST.
5. Selection of M&TE/standards must be based on the measurement type, range and accuracy required to determine conformance to requirements containing acceptance parameters and/or tolerances.
6. The calibration method and frequency (5-year maximum) of calibration for M&TE/standards must be defined, based on the type of equipment, stability characteristics, accuracy, intended use, and other conditions affecting capability.
7. When measurement standards or M&TE are either removed from service, removed from periodic calibration, or placed in storage, and they have been used since their last calibration, a

final calibration (cross-check/loop closure) must be performed.

8. In the event that measurement M&TE/standards are found out-of-tolerance (OOT) during recalibration or loop closure the Supplier must perform an evaluation of impact to the Buyer's product/data and provide notification to the Buyer in writing if there is an impact to the Buyer's product/data.
9. For lost or damaged equipment, the Supplier must notify the Buyer in writing of the lost or damaged equipment and the potential impact to the Buyer's product/data.
10. Records must be maintained to ensure traceability of all M&TE/standards used for verifying conformance of Buyer product/data.
11. If the Buyer and the Supplier mutually agree to use the Supplier's equipment for Buyer product acceptance (inspection, test and acceptance to product definition requirements), then the Supplier's Standards and Calibration Program will be reviewed by the KCNSC Metrology Organization or the Sandia Primary Standards Lab (PSL) to verify the Supplier's calibration controls comply with the requirements outlined in the Buyer's PQR 2698, Calibration Control Specification and must be assessed by the Buyer's Contractor Standards Laboratory (CSL) as a Designated Calibration Source (DCS) or Commercial Testing Laboratory (CTL) requirements.

J. INSPECTION, TEST AND ACCEPTANCE

The supplier must perform inspections and tests to validate the Buyer's Purchase Order and associated drawing and specification requirements are met as follows:

1. Inspection and testing of specified items, services, and processes must be conducted under controlled conditions using established acceptance and performance criteria.
2. Sampling plans prescribe random sampling and afford a sound statistical basis to ensure product quality.
3. Inspection and test requirements and results must be documented.
4. Equipment used for inspections and tests must be calibrated and maintained.
5. Qualified persons, other than those who perform or directly supervise the work being inspected or tested, must perform acceptance inspections and tests verifying Buyer related product conformance to design criteria.

6. When the Buyer proposes to Accept Product based upon the Supplier's Data. The Supplier must have an established process for maintaining the traceability between the product and the measuring and test equipment used for product acceptance.

K. CONTROL OF ITEMS

The supplier must have a written procedure such that items are identified and controlled to ensure proper use and maintained to prevent damage, loss, or deterioration. The supplier must:

1. Identification of Items
 - a. Markings must be applied using methods that provide for clear and legible identification;
 - b. Not degrade the function or service life of the item;
 - c. Be transferred to each part of an identified item when subdivided;
 - d. Not be obliterated or hidden unless other means of identification are substituted; and
 - e. Where physical identification on the item is either impractical or insufficient, physical separation, procedural control, or other appropriate means must be employed.
2. Control of Items
 - a. Markings, authorized stamps, tags, labels, routing cards, physical location, or other suitable means must identify the status of items from the initial receipt and fabrication of items up to and including use.
 - b. Items must be traceable to the applicable specification and grade of the material; heat, batch, lot, part, or serial number; or specified inspection, test, or other records.
 - c. The process must provide for maintenance or replacement of markings and identification records due to damage from handling or aging, as well as protection of identifications on items subject to excessive deterioration due to environmental exposure.

3. Status of Items

- a. The status of inspection and test activities must be identified either on the items or in documents traceable to the items where it is necessary to ensure that required inspections and tests are performed.
- b. Items which have not passed the required inspections and tests must not be installed, used, or operated.

4. Tooling and Fixtures

- a. Tooling and fixtures (e.g., dies, molds, fixtures, gages, crucibles, assembly tools, disassembly tools, handling devices) used in conjunction with Buyer related production, surveillance, or dismantlement must be identified and controlled.

5. Limited-Life Materials and Components

- a. Materials and components having limited calendar, operating or cycle life must be identified and controlled to preclude use of expired items.
- b. Means for efficient recall and disposition of limited-life materials and components must be established.

6. Materials or Items Designated for Destructive Testing

- a. Controls must be established for materials or items designated for destructive testing or special evaluation to ensure testing or evaluation is performed to specified requirements and to prevent inadvertent use or shipment.

7. Special Instructions and Environments

- a. Instructions for marking and labeling items must be established as necessary to adequately identify, maintain, and preserve the items, including an indication of the presence of special environments or the need for special controls.

L. HANDLING, STORAGE, PACKAGING, PRESERVATION AND DELIVERY

The Supplier and/or Product Manufacturer must have a written procedure to ensure that items (product, documents, equipment, etc.) are identified and controlled to ensure proper use and maintained to prevent damage, loss, substitution or deterioration due to handling, aging or environmental deterioration.

The procedure must also include requirements to ensure part markings are transferred when subdividing a lot, batch, etc. of a part or material. If markings or identification records need to be replaced, they must be researched to ensure their accuracy prior to replacement.

The Supplier must prepare and submit a signed certificate of conformance and test data as required by the purchase order with each shipment of product to the Buyer. Product certification must be supported by quality evidence.

M. CONTROL OF NONCONFORMING PRODUCT

The supplier must establish a written procedure for the control of nonconforming product as follows:

1. Establish a process to ensure that products that do not conform to requirements are prevented from unintended use or shipment.
2. Control of nonconforming items must provide for the identification, documentation, and evaluation of the item.
3. Nonconforming items must be identified by legible marking, tagging, or other methods on the item or on the container or package containing the item. Marking must be durable and not detrimental to the material.
4. Nonconforming items must be segregated, when practical, by placing them in a clearly identified and designated hold area until properly dispositioned. When segregation is impractical or impossible due to physical conditions such as size, weight, access, or other limitations, other precautions must be employed to preclude inadvertent use of a nonconforming item.
5. Suppliers have the authority to disposition product only as scrap or rework. All other nonconforming dispositions must be coordinated with the Buyer. Nonconforming dispositions must be documented.
6. Reworked items must be reexamined in accordance with applicable procedures and the original acceptance criteria.
7. When nonconforming items are identified, including Limited Life items, an evaluation must be performed to determine if any other previously supplied product is affected. If yes, the supplier

must promptly notify the Buyer. The Buyer will provide disposition guidance on nonconforming issues.

8. The supplier must notify the Buyer when a nonconforming condition is identified with Buyer furnished items. The Buyer will provide direction for disposition of such items.

N. CORRECTIVE ACTION

The Supplier must have a written procedure(s) to define the corrective action process. The process must:

1. Define the cause(s);
2. Address corrective and preventive measures;
3. Corrective action measures must be in-place prior to continuing work;
4. Capture and communicate lessons learned for effective use in preventing problems and making improvements;
5. Identify and perform effectiveness review(s), as needed; and
6. Senior management must take appropriate action to determine the cause(s) and correct any systemic related failures.

O. RECORDS RETENTION

The Supplier must maintain records of inspection and tests for purchased and manufactured products. Records must provide objective evidence of quality control operations performed, the results obtained and corrective action(s) taken. Records must be maintained by the Supplier for a minimum of 3-years after shipment of product to the Buyer or as agreed in the Buyer's Purchase Order. Additionally, evidence of personnel training, qualification, or certification must also be retained for a minimum of 3-years.

P. EXPORT CONTROL REQUIREMENTS

Suppliers operating under this Program are subject to Export Controls in accordance with the Arms Export Control Act, or the Export Administration Act of 1979 or the Atomic Energy Act of 1954. As such;

Suppliers must have a written procedure that describes controls for ensuring that only U.S. persons are allowed access to ECI/OUO information and items. At a minimum, the written procedure must address: Access Control, Storage, Electronic Transmission, and Destruction policies as noted below.

1. Access Control:
 - a. ECI/OUO information and items must be maintained in a secured area to prevent inadvertent release or disclosure to foreign persons.
 - b. Foreign persons (non-US persons), including employees, consultants, visitors, and/or sub-contractors, must be restricted from having access to ECI/OUO information and items through any means (this includes overhearing conversations, observing material or information, or otherwise obtaining access in any way).
2. Storage:
 - a. ECI/OUO information and material must be stored in a secured area to restrict access from foreign persons.
3. Transmission:
 - a. The Supplier is responsible for flowing down ECI/OUO requirements to their suppliers used to support Buyer's product requirements.
 - b. ECI/OUO information must be sent through a secure method when transmitting electronically (i.e. encryption, password protection, or secure FTP site).
4. Destruction:
 - a. ECI/OUO articles/information must be destroyed when no longer needed as appropriate for their industry as follows:
 - i. Manufacturers -- documents, electronic media, models and materials (including scrap and in-process scrap) must be destroyed when no longer needed.
 - ii. Service Providers – documents and electronic media must be destroyed when no longer needed.
 - iii. Distributors -- documents and electronic media must be destroyed when no longer needed.
 - iv. Laboratories – documents, electronic media and test samples (less returned to the Buyer) must be destroyed when no longer needed.
5. Destruction must make said items unrecognizable and must subsequently be disposed using normal waste processing.

Q. BUYER-CERTIFIED PROCESSES

For Buyer Certified Processes (X-ray; magnetic particle, ultrasonic; penetrant and drawing specified manufacturing processes), the Supplier must provide adequate methods and facilities to assure conformance with all requirements of the Buyer's certified process specifications. Each certified process must be performed in accordance with instructions specified in the Buyer requirements which include or reference procedure, personnel and equipment qualification requirements. After written Buyer approval has been granted, the Supplier must make no changes to certified processes without written Buyer approval. When a Subcontractor is used and approved by the Buyer, the Supplier must not change to another Subcontractor without written Buyer approval.

R. D-TEST/ENGINEERING SAMPLES

Controls must be established for materials or items designated for destructive testing or special evaluation to ensure specified requirements are met and to prevent inadvertent use or shipment.

S. BUYER REQUIRED REPORTS

The Supplier must prepare technical data reports of production and sampling tests and inspection as required by the Buyer's Purchase Order. Such reports must include the Buyer's part name, part number and suffix, drawing number and issue, the Buyer's purchase order number, lot description and quantity. When the Supplier is not the manufacturer of the product, the report must also include the manufacturer's name. In the case of serially numbered units or products, such data must be related to the serial number of the unit or product. Records must be legible, reliable, identifiable and retrievable.

The Supplier must prepare technical data reports of chemical and physical properties of materials and plating as required by the Buyer's Purchase Order. Such reports must contain the Buyer's part number and suffix, drawing number and issue, the Buyer's purchase order number, product designation when applicable, lot description including the name of the manufacturer, date of the test and the laboratory/testing facility name if other than the Supplier. When quantitative data are required, such reports must contain the actual test values.

All required reports must be forwarded to the Buyer as directed by the Buyer.

T. ASSESSMENTS

The Supplier must have a written procedure for Quality Management Assessments, such that:

1. Assessments are planned, conducted, and documented;
2. Assessment items (parts, materials, tools, fixtures, etc.) and service quality are evaluated;
3. The adequacy of work performance (i.e., processes) are evaluated;
4. Assessments promote improvement;
5. Organizational performance to QMS requirements are reported.
6. Personnel conducting assessments must be technically qualified and knowledgeable in the areas assessed.
7. Assessment plans must identify the objectives, scope, approach, and performance criteria to be used.
8. Objective evidence must be examined to the depth necessary to determine whether requirements are being met.
9. Conditions requiring prompt corrective action must be reported immediately to management of the assessed organization.
10. Assessment reports must be sent to the responsible management for consideration of corrective action(s).

U. SOFTWARE QUALITY ASSURANCE

The Supplier must have a written procedure to address the Software Quality Assurance (SQA) process to provide assurance that commercially procured and supplier developed software applications/scripts/configurations applicable to product inspection, test, and acceptance of items (parts, materials, tools, fixtures, etc.), will validate that items meet Buyer Purchase Order requirements.

1. Requirements must be identified, testable, and controlled.
2. Software configuration management must ensure:
 - a. A software baseline is established no later than the completion of the software validation process; and
 - b. Changes subsequent to the baseline are traceable to software requirements, approved, documented, and added to the baseline so that the baseline defines the most recently approved software configuration.
3. Software verification and validation activities must be controlled, documented, and demonstrate that requirements are met before use and after changes.

V. DESIGN

When the Supplier designs products in support of the Buyer's Purchase Order or provides design services, design processes must ensure:

1. When the PO specifies the need for design services, the supplier must have an established and documented process for design requirements including: design inputs, design requirements, verification, reviews, and approvals. Design changes must be controlled, documented, and include evaluation of effects of the changes.
2. Design and related design information must be protected such that it is not lost, damaged, or compromised in any way.
3. Where the Supplier provides design information or partial design information, the Supplier must have an established process to ensure that the Supplier's drawings and specifications are in agreement with the Buyer's drawings and specifications prior to Purchase Order acceptance. The Supplier must establish and maintain a process that ensures traceability of all product design and process changes.

7. APPENDIX

A. DEFINITIONS

Administrative Change:

A change to Supplier production or inspection work instructions, which is not defined as significant.

Buyer:

Honeywell Federal Manufacturing and Technologies (FM&T) or Sandia National Laboratories (SNL)

Buyer Requirements:

The Purchase Order specifies the drawings which set forth the product requirements imposed upon and agreed to by the Supplier. This product definition is amended jointly by mutual agreement by the Buyer and Supplier upon drawing changes (ACO or FCO). Refer to Section II for the itemization and order of precedence of these documents.

Calibration Program Approval (Honeywell FM&T):

Approval granted to the Supplier that its calibration program meets the requirement of the Buyer's PQR 2767 Designated Calibration Source (DCS) Calibration Program Specification and of the Buyer's PQR 2698 Calibration Control Specification. Calibration program approval requirements are listed in the purchase order.

Calibration Program Approval (Sandia National Laboratories):

Approval granted to the Supplier that its calibration program meets the requirement of the Buyer's PQR 2698 Calibration Control Specification and requirements for Designated Calibration Source approval for each component or family of components, if required by the Buyer's measurement assurance plan.

Certificate of Conformance:

A signed document stating that the supplied product meets specified Buyer requirement.

Certification:

The process of approving the adequacy of an operation or set of operations, a piece of equipment or an individual to produce material that conforms to specified requirements or perform services that are within specified limits. Certification must be documented and signed by a competent authority and must be based on an evaluation conducted according to a defined and documented plan that is designed to assure that requirements are met or exceeded. Approval requirements for Buyer required certified processes are defined in the purchase order.

Certified Processes:

Special manufacturing, inspection and testing methods specified in the purchase order that require the Buyer's review and approval prior to use by the Supplier or the Supplier's Sub-contractor. Examples of these processes are dye penetrant inspection, radiography, magnetic particle inspection, fusion welding and ultrasonic testing. Certified process approval requirements are listed directly in the purchase order.

COTS (Commercial Off-The-Shelf):

Parts that are available in the market place for any customer to buy and whose design is controlled by the manufacturer. Mil-Std parts are an exception since they are controlled by a government agency. Annual periodic validation of COTS items is not required.

Engineering Change Order:

A document prepared by the Buyer's technical personnel to modify Buyer drawings and specifications. An engineering change may be issued as an Advance Change Order (ACO) or as a Final Change Order (FCO) concurrently with the drawing change. Incorporation of engineering change orders must be in accordance with the provisions of the purchase order.

ECl:

Export Controlled Information – Documents contain technical data whose export is restricted by the Arms Export Control Act, or the Export Administration Act of 1979 or the Atomic Energy Act of 1954. Violations of these export laws are subject to severe criminal penalties.

Inspection:

An independent assessment by a person or persons not directly responsible for the work being evaluated to critically examine the features of an object, or to exercise it to determine its operating characteristics in order to certify conformance to product drawing requirements. This includes visual inspection and performance testing.

Laboratory/Testing Facility:

A facility performing physical, chemical, pressure, electrical, plating, environmental or other tests to determine conformance of materials or products to Buyer requirements.

Laboratory/Test Capability Approval:

Approval granted to the Supplier or Supplier's Sub-contractor by the Buyer based upon an evaluation of the ability to perform tests designated by the purchase order. These tests are not independently verified by the Buyer on Buyer controlled equipment. Laboratory/test capability approval requirements are listed directly in the purchase order.

OUO:

Official Use Only – Document may be exempt from public release under the freedom of information act.

Qualification:

The approval of a design and associated manufacturing and acceptance processes that confirms the capability of the product or service to meet or exceed Buyer requirements.

QE and EE (Qualification Evaluation and Engineering Evaluation):

An evaluation by the Buyer of processes used in manufacture and inspection of the product specified in the Buyer's requirements. Formal written approval from the Buyer is required prior to production beyond the evaluation lot.

Quality Evidence:

Recorded information, which indicates the extent of conformance of items or characteristics to specified requirements. This information may be based on physical inspections, process controls, physical and chemical tests, non-destructive tests or any combination of these. This information includes:

Quantitative Data:

Values (variables data) that result from determining the magnitude of a characteristic with respect to a standard scale (such as values obtained by dimensional measurement, chemical analysis, tensile testing or electrical testing). This is the preferred form of data for all Buyer required Supplier tests.

Qualitative Data:

Determined status of a characteristic (attributes data) with respect to only two possible conditions (such as present or absent, go or no-go, and pass or fail).

Process Control Data:

Values and resultant statistics accumulated by continuous evaluation of characteristics of a process, and the items it produces, to demonstrate the degree of uniformity or variability among items.

Raw Material:

Material (Aluminum, Brass, Steel, etc.) that is available in the market place for any customer to buy whose requirements are controlled by an industry standard. Annual periodic validation is required.

Sales Office:

An independent distributor or a company division that handles sales and marketing for the entire Supplier organization.

Significant Change:

A change from an existing specific production location, environmental condition, process, production material, sequence of operations, method or process for producing a product to a new location, environment, material, method, sequence or process for products which require Qualification Evaluation (QE) or Engineering Evaluation (EE).

Sub-contractor:

The term used herein to designate an individual or organization supplying material, parts and/or services to the Supplier.

Supplier:

The term used herein to designate the individual(s) or organization that **provides materials**, parts, components, apparatus or services to the Buyer.

Supplier Evaluation:

An examination of the Supplier's documents and/or a survey of the Supplier's facility to determine the capability of the Supplier to meet the requirements of this Quality Program Specification.

Testing:

To perform a critical evaluation or examination of raw or commercial materials to determine their physical properties, such as chemistry, grain size, tensile strength, hardness, etc.