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Prepared By: __________________________ Date: 4/3/15 Manager, Global Quality Engineering

Csaba Otvös

Approved By: __________________________ Date: 8/4/15 Director, Quality Worldwide

Robert Hechinger

Approved By: __________________________ Date: 10/4/15 President, Fisher

Kevin G. Meyer
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Appendix A
Fisher Controls International LLC Organization Chart
1. SCOPE

1.1. General

This Quality Management Systems Manual specifies requirements for a Quality Management System where Fisher Controls International LLC:

- needs to demonstrate its ability to consistently provide products that meet customer and applicable statutory and regulatory requirements
- aims to enhance customer satisfaction through the effective application of the quality management systems described herein. These systems include processes for continual improvement and the assurance of conformity to customer and applicable statutory/regulatory requirements.

This Quality Management Systems Manual sets forth requirements to be implemented by Fisher Business Unit management and support function personnel who do not report to manufacturing plant management. This Manual sets the direction for the Fisher Manufacturing Sites who operate under their own Quality Management System Manuals and / or Site Procedures. The Quality Management System processes flow through Fisher to the Manufacturing Sites. The Manufacturing Sites are primarily responsible for product realization. Fisher process activities may physically be performed at locations exclusively established for their purpose, or may share space at the manufacturing sites. (See Figure 1.)

The Fisher Business Unit processes described within this manual are performed for the benefit of entire Fisher Controls International LLC and need not be duplicated at the manufacturing sites in an attempt to demonstrate compliance with the ISO 9001:2008 and other applicable standards such as the Pressure Equipment Directive 97/23/EC.

Processes described within this Manual are also in line with ISO29001 requirements.

1.2. Process Approach

For Fisher Controls International LLC to function effectively, it must determine and manage numerous linked activities. A “process” is any activity or set of activities that uses resources and enables the transformation of inputs into outputs. Often, the process output from one process directly forms the input to the next process. The application of a system of processes within an organization, together with the identification and interactions of these processes, and their management, to produce the desired outcome, can be referred to as the “process approach.”

A model of a process-based Quality Management System is shown in Figure 2 and highlights the process linkages in sections 4.0 through 8.0 of this manual. The illustration depicts how the process requires the customer to play a significant role in defining requirements as inputs. Monitoring customer satisfaction requires the evaluation of information relating to customer perception as to whether Fisher Controls International LLC has met the customer requirements. The model shows the requirements of the Quality Management System, but does not show the processes at a detail level.

Figure 3 shows the general processes in place at Fisher Controls International LLC.
Figure 1. Fisher Quality Management Process.
Figure 2. Model of a Process-Based Quality Management System.
Figure 3. General processes in place at Fisher Controls International LLC.
Management Process

Figure 4. General Management process in place at Fisher Controls International LLC.
Figure 5. General Engineering process in place at Fisher Controls International LLC.
Order Process

![Order Process Diagram]

Figure 6. General Order process in place at Fisher Controls International LLC.
Figure 7. General Manufacturing process in place at Fisher Controls International LLC.
1.3. Application

Requirements of this Quality Management Systems Manual are intended to be applicable to each Fisher location.

Where requirements of this Quality Management Systems Manual are not able to be applied to a Fisher location, the requirements may be considered for exclusion provided they are limited to those requirements within clause 7 (Product Realization). Requirements may also be considered for exclusion provided that the exclusions do not affect the Fisher location’s ability or responsibility to provide products that meet customer and applicable statutory and regulatory requirements.

2. NORMATIVE REFERENCE

The referenced document(s) contains provisions, which, through reference in this Manual, constitute provisions of this Quality Management Systems Manual. The latest revision of these documents applies, unless otherwise stated by edition, issue, revision, or date.

3. TERMS AND DEFINITIONS

This Quality Management Systems Manual makes use of words and terms to describe concepts and requirements. The objective is to use simple, technically accurate terms and, to the greatest extent possible, rely on common dictionary definitions. However, as with most technical subjects, some terms have specific meanings that differ from their more common dictionary definitions. Definitions of terms listed here have normative status and take precedence over common dictionary definitions.

Audit: Systematic, independent and documented process for obtaining audit evidence and evaluating it objectively to determine the extent to which audit criteria are fulfilled.

Audit Findings: Results of the evaluation of the collected audit evidence against audit criteria.

Auditor: Person with the demonstrated personal attributes and competence to conduct an audit.

Competence: Demonstrated personal attributes and capability to apply knowledge and skills.

Conformity: Fulfillment of a requirement.

Continual Improvement: Recurring activity to increase the ability to fulfill requirements.

Note: The process of establishing objectives and finding opportunities for improvement is a continual process through the use of audit findings, and audit conclusions, analysis of data, management reviews, or other means and generally leads to corrective or preventive action.

Correction: Action to eliminate a detected nonconformity.
**Corrective Action:**
Action to eliminate the cause of a detected nonconformity or other undesirable situation.

**Customer Satisfaction:**
Customer’s perception of the degree to which the customer’s requirements have been fulfilled.

*Note: A customer can be internal or external to the organization.*

*Note: Customer complaints are a common indicator of low customer satisfaction but their absence does not necessarily imply high customer satisfaction.*

*Note: Even when customer requirements have been agreed with the customer and fulfilled, this does not necessarily ensure high customer satisfaction.*

**Defect:**
Non-fulfillment of a requirement related to an intended or specified use.

**Design and Development:**
Set of processes that transform requirements into specified characteristics and into the specification of a product, process, or system.

**Document:**
Information and its supporting medium. i.e. Quality Manual, Procedures, Instructions, Drawings, Reports, etc.

*Note: The medium can be paper, magnetic, electronic, an optical computer disc, photograph or master sample, or a combination thereof. A set of documents is frequently called “documentation.”*

**Effectiveness:**
Extent to which planned activities are realized and planned results achieved.

**Fisher Controls International LLC:**
Legal entity of Fisher.

**Fisher Business Unit:**
Divisional organization and its employees who provide support to all plant sites including Product Development, Order Management, Applications Engineering and other global functional areas. Shown in “red box” in Figure 1.

**Fisher location:**
Manufacturing sites owned by Fisher Controls International LLC shown in “blue box” in Figure 1.

**Information:**
Meaningful data.

**Infrastructure:**
System of facilities, equipment and services needed for the operation of an organization.

**Inspection:**
Conformity evaluation by observation and judgment accompanied as appropriate by measurement, testing or gauging.

**Management:**
Coordinated activities to redirect and control an organization.

*Note: The term “management” may refer to people with authority and responsibility for the conduct*
Management Systems: System to establish policy and objectives, and to achieve those objectives.

Note: A management system of an organization can include different management systems, such as a quality management system, a financial management system, or an environmental management system.

Nonconformity: Non-fulfillment of a requirement.

Objective Evidence: Data supporting the existence or verity of something.

Note: Objective evidence may be obtained through observation, measurement, test, or other means.

Organization: Group of people and facilities with an arrangement of responsibilities, authorities, and relationships i.e. Company, Corporation, Firm, Enterprise institution, charity, sole trader, and association etc.

Preventive Action: Action to eliminate the cause of a potential non-conformity or other potential undesirable situation.

Procedure: Specified way to carry out an activity or a process.

Note: Procedures can be documented or not. When a procedure is documented, the term “written procedure” or “documented procedure” is used.

Process: Set of interrelated or interacting activities which transform inputs into outputs.

Note: Inputs to a process are generally outputs of other processes. Processes in an organization are generally planned and carried out under controlled conditions to add value. A process where conformity of the resulting product cannot be readily or economically verified is frequently referred to as a “Special Process.”

Product: Result of a process, i.e. Service, Software, Hardware, Processed material.

Qualification Process: Process to demonstrate the ability to fulfill specified requirements.

Quality: Degree to which a set of inherent characteristics fulfill requirements.

Quality Improvement: Part of quality management focused on increasing the ability to fulfill quality requirements.

Quality Management: Coordinated activities to direct and control an organization with regard to quality.

Quality Management: Management system to direct and control an organization with regard to quality.
**System:**

**Quality Manual:** Document specifying the quality management system of an organization.

*Note:* Quality manuals can vary in detail and format to suit the size and complexity of an individual organization.

**Quality Objective:** Something sought, or aimed for, relating to quality.

*Note:* Quality objectives are generally based on the organization’s quality policy and are generally specified for relevant functions and levels in the organization.

**Quality Policy:** Overall intention and direction of an organization related to quality as formally expressed by top management.

**Record:** Document stating results achieved or providing evidence of activities performed.

**Repair:** Action taken on a nonconforming product to make it acceptable for the intended use.

**Requirement:** Need or expectation that is stated, generally implied or obligatory.

**Review:** Activity undertaken to determine the suitability, adequacy, and effectiveness of the subject matter to achieve established objectives.

**Rework:** Action on a nonconforming product to make it conform to the requirements.

** Scrap:** Action on a nonconforming product to preclude its originally intended use.

**Specification:** Document stating requirements.

**Supplier:** Organization or person that provides a product or service.

**Test:** Determination of one or more characteristics according to a procedure.

**Top Management:** Person or group of people, who direct and control an organization at the highest level. i.e. Fisher Management, Executive Management, and Manufacturing Site Management.

**Validation:** Confirmation, through the provision of objective evidence, that the requirements for a specific intended use or application have been fulfilled.

*Note:* The term “verified” is used to designate the corresponding status. Confirmation can comprise of activities such as performing alternate design calculations, undertaking tests and demonstration, and reviewing documents prior to use.

**Work Environment:** Set of conditions under which work is performed.

*Note:* Conditions include physical, social, psychological, and environmental factors, e.g. temperature, recognition, ergonomics, and atmospheric composition.
4. QUALITY MANAGEMENT SYSTEM

4.1. General Requirements

Fisher Controls International LLC is a wholly owned subsidiary of Emerson Electric Co., operating under Emerson Process Management. Fisher Controls International LLC provides valves, actuators, flow-control devices and instruments to the Process Control Industry worldwide. Fisher Controls International LLC maintains facilities located throughout the world, with its President located in Marshalltown, Iowa, and Fisher Management in North America, Europe, Middle East, and Asia-Pacific. The President reports to Executives located with Emerson Electric in Marshalltown, Iowa and St. Louis, Missouri.

The Fisher Management organization determines the processes for the Quality Management system. These processes provide direction and common support activities for the Fisher plant locations. It is for this purpose that this Quality Management Systems Manual has been prepared.

Each Fisher location is required to adhere to the Quality Management System requirements, as applicable to the activities described within this Manual. However, each location is provided the latitude to establish their own processes, criteria, and methods needed to ensure the operations and controls of these processes are effective. This includes, but is not limited to managing the availability of resources, administering information necessary to support the operation, monitoring, measuring, and analyzing the processes, and taking the necessary actions to achieve improvement of the processes, provided the processes at each location are managed in accordance with the requirements of ISO 9001.

Where a Fisher location chooses to outsource a process that affects product conformity with requirements, Fisher location shall ensure control over such processes. The type and extent of control to be applied of these processes shall be identified within the Fisher location quality management system.
4.2. Documentation Requirements

4.2.1. General

Fisher’s Quality Management System is described through various levels of documents as shown in the Documentation Pyramid.

Documentation Pyramid

- Describe Global Process
  Define Global Responsibilities

- Describe Site Process
  Define Site Responsibilities

- Describe Primary Processes
  Define Primary Responsibilities

- Describe Detailed Instructions
  Forms / Tools used as records

- Specifications, Work Instructions & Forms / Tools

Fisher Quality Manual

Site Quality Manual

Primary Standards & Procedures
Each Fisher location shall document the quality management systems applicable to their activities. The documentation is to include:

- statements of a quality policy and objectives fashioned from the Fisher Controls International LLC,
- quality manual and / or index to Implementing Procedures,
- documented implementing procedures,
- documents which ensure effective planning, operation, and control of applicable processes, and
- records required by Fisher Business Unit, Codes and Standards, and regulations.

### 4.2.2. Quality Manual

Fisher Controls International LLC recognizes its responsibilities as a provider of process control equipment to comply fully with customer and applicable statutory and regulatory requirements. To this end, a quality management system has been developed. This system establishes controls throughout the entire business cycle from proposals and bids to end-item delivery and service. It also assures meeting business and quality objectives and minimizes the possibility of compromises, which could affect product quality, safety, and reliability. The Quality Management System is complete and responsive to the requirements of the ISO 9001 standard. The Quality Management System and referenced procedures outlined by this manual define the policy of Fisher Controls International LLC.

This Manual has been prepared to define the Quality Management System requirements for Fisher described herein. The Fisher Quality Management Systems Manual is a narrative description of the processes designed to provide our employees, as well as our customers and suppliers, with an overview and insight into our quality policies and procedures which govern the delivery of our products and services. It is to be used to implement activities affecting quality at Fisher Controls International LLC locations.

The referenced Fisher Quality Assurance Procedures are documents that prescribe actions and assign responsibility to whom, where, when, and how each procedure is to be performed. Compliance with the procedures is required.

Processing Requirements, in addition to those set forth within this Quality Management System Manual, have been prepared to specifically address certain statutory and regulatory requirements for Sales Orders which are subject to these regulations. Each Fisher Controls International LLC location responsible for the processing of these Sales Orders is required to comply with these Processing Requirements.

This manual will be revised and added to, as necessary, to reflect changes in quality requirements and is issued on a controlled-copy basis. It is the goal of Fisher Controls International LLC and the purpose of this Quality Management Systems Manual to assure the quality and reliability of our products and services.

Suggestions for improvement to this manual are solicited from its users. Users may submit suggestions to Fisher Quality Assurance personnel for consideration.
Supporting Fisher Procedures

Fisher General Specification - FGS 15B15.2 - Pressure Equipment Directive (PED) Processing Requirements

Note: Many countries such as but not limited to Brazil, South Korea, Russia, China, India, etc. model their requirements after the IECEx Scheme.

4.2.3. Control of Documents

The requirements for the preparation, review, approval, distribution, and revision of documents required by the Fisher Quality Management System are described herein. The control of documents is further defined within applicable documented procedures associated with the documents needing control at the Fisher and site organizations. Documents are maintained in either electronic format or hard copy (paper). In either case, documents are approved by the respective responsible organization. Changes to documents are approved in the same manner as the original document.

Master lists of the documents are maintained which provide the most current revision level and to preclude the use of invalid or obsolete documents.

Control of Electronic Documents

Electronic Documents may reside in a secured electronic vault (such as EDOCS, Model Manager, QADocs, PRIME, etc.). Superseded, inactive, and obsolete documents will be stored in the secured document directory. Secured documents will be accessible only to the document owners. A complete listing of the documents may be seen in the appropriate document index.

In the electronic systems, inactive and obsolete documents will be removed from active service upon approval of the document owner. Superseded documents will be removed from active service upon distribution of the new revision. New documents that have been approved by the document owner will be added to active service upon distribution.

The documents on electronic systems are protected from unauthorized use by the requirement that a user enter a “Log-In ID” and/or “Password.”

Control of Paper Documents

Paper documents that have been approved by the document owner may be distributed. Documents are to be distributed in accordance with Distribution Lists maintained by the document owner.
An acknowledgment of receipt for the distributed document is not required, unless specified otherwise for the controls of said document.

Upon receipt of the distribution of a document, the *superseded* document shall be removed and replaced with the latest revision. Upon notification of a document status being changed to *inactive* or *obsolete*, the document shall be removed from active status and be properly discarded.

Those sites or persons authorized to maintain an *obsolete* document files are to mark the document as *obsolete*. The file may then be stored in a folder or binder. It must be clear that the file contains *obsolete* documents. Copies made of these documents shall be clearly identified as *obsolete*.

**Additional Control Rules**

Persons requiring a copy of an *obsolete* document may request it from the document owner. Copies shall be identified as *obsolete* documents.

Printed electronic master documents are to be considered uncontrolled. However, electronic document users are permitted to have a controlled paper document set, as long as there is a control system that ensures current active documents are being used. The owner of the controlled paper document set is responsible to ensure that his/her subordinates are using current active documents.

**Supporting Fisher Procedures**

Fisher General Specification - **FGS 15B41** - Control of Documents
Engineering Standard - **ES 145** - Maintenance Requirements for Standards and Specifications
Engineering Standard - **ES 242** - Controlled Documents and Data

4.2.4. Control of Records

In accordance with the Emerson Electric Co. Records Retention Manual, Fisher Controls International LLC version, “the Company” retains records for many purposes. Certain records are necessary for the Company’s day-to-day business decisions, while others must be retained pursuant to government enforcement actions or civil litigation (including pending or threatened government enforcement actions or civil litigation). The proliferation of copying machines and the use of electronic mail and computers reduces the ability of the Company to know, at any given time, whether it has a copy of a record unless all personnel follow a uniform procedure for the retention and disposition of Company records. The Company also incurs substantial storage and handling costs where records are kept longer than necessary. This policy seeks to address these considerations by identifying the types of records the Company retains and by establishing guidelines with respect to when and if they should be discarded.

The Records Retention Officer is responsible for supervising Fisher Controls International LLC’s compliance with this policy. Questions or comments about implementing this policy should be
directed to the Records Retention Officer. Compliance with this policy is required of everyone in the Company.

**Supporting Fisher Procedures**

Fisher General Specification - FGS 15B15.1 - Control of Records

**5. MANAGEMENT RESPONSIBILITY**

**Core Values:**

- An uncompromising commitment to safety and quality
- A clear focus on delivering customer results
- A drive for exceptional performance
- A reputation for integrity that is earned every day
- A passion for innovation
- A culture built upon people and relationships

**5.1. Management Commitment**

The executive management of Fisher Controls International LLC demonstrates its commitment to the development and implementation of the quality management system and continually improving its effectiveness by having established:

- Formal communication plans used throughout Fisher to provide a means of effectively communicating its business Core Values, quality policies, goals, objectives, customer expectations, and statutory/regulatory requirements which impact Fisher’s business activities and the products and services provided,
- A quality policy for Fisher that mandates conformance to requirements and continual improvement,
- Measurable business and quality objectives, which enable Fisher to focus its attention and obtain meaningful results,
- A system by which management may review the performance of Fisher operations, measure performance in regards to the established goals and objectives, and make the necessary changes when required; and
- A system by which the business may identify and obtain the necessary human and physical resources needed to achieve success within the business operations.

**5.2. Customer Focus**

Fisher Controls International LLC is committed to its customers. Fisher strives to provide products and services of the highest quality, which assures our customers that their requirements have been clearly satisfied. This commitment is expressed in the responsiveness of Fisher employees to address customer needs in the Quality Policy put forth by management.
5.3. Quality Policy

Fisher Controls International LLC is committed to continual quality improvement. To achieve this objective, the policy of Fisher is defined as follows:

“Our mission is to be the leading supplier of process management solutions that provides excellent products and services to increase our customer’s competitiveness.

Customer loyalty is our primary goal.

We are committed to comply with the Quality Management System and regulatory requirements.

We empower our employees to initiate actions to ensure both quality and continual improvement in all that we do.

We behave as an ethical and responsible organization in all we do.”

Kevin G. Meyer
President, Fisher
Fisher Controls International LLC

Management within Fisher is responsible for communicating this policy to each employee via communication plans, training, and postings.

The Quality Policy will be reviewed in accordance with the revision of the Fisher Quality Manual to assure its continuing suitability.

5.4. Planning

As an operating unit of Emerson Electric Co., Fisher Controls International LLC participates annually in executive management-planning processes with Emerson Management. These are:

- **Planning Conference** – An annual review that looks 5 years back and 5 years forward at the business with a focus on sales, markets, key customers, and products. The conference looks at 5 years of historical activity, present business position, and plans, goals and objectives for the next 5-year period.

- **Profitability Review** – An annual review that looks 5 years back and 5 years forward with a focus on the Manufacturing Operations, performance to sales objectives, cost reductions, capital resourcing, material containment, research and development resources, and profitability. Performance plans, goals, and objectives are set as a result of this review.

- **Perfect Execution Review** – an annual review that looks 3 years forward with a focus on Understanding Customer needs, Designing Products and Organization to meet those needs, Planning supply chain to provide material locally for short lead-times and Executing orders at high
service levels to provide schedule certainty to Customers. The review looks at historical and
future performance targets for Safety, Quality, and Execution with plans, goals and objectives for
the next 3 year period.

- **Technology Review** – A bi-annual review with a focus on marketing, engineering, manufacturing
design technology, research, new product development, and manufacturing ability to produce new
products, so as to provide quality products for customers at competitive prices.

- **Organization Review** – An annual review that looks 3 years back and 3 years forward with a
focus on organization structure, succession, diversity, and recruitment planning. The review
emphasizes the levels of management and supervision and staffing requirements to run the
business.

In addition to the annual planning reviews, Fisher Management leads the Sales and Operations
Planning (S&OP) process.

- **S&OP Process** – The S&OP process is used to gain the consensus of the organization and
implement into a single operating plan. This is done through a monthly planning process that
consolidates time phased business projections for product demand and supply covering a rolling
18-month period.

### 5.4.1. Quality Objectives

Based on the information resulting from the planning processes, executive management establishes
goals and objectives needed to meet the requirements of the business. These include, but are not
limited to, performance objectives that are communicated and measured throughout the organization
and the expectations for customer satisfaction, product requirement and development, fiscal
management, profitability, employee satisfaction, and organizational improvement.

Objectives, which are consistently set, are:

- Customer Loyalty and Satisfaction
- On-Time Delivery to Customer Required Date
- Lead Time Reduction
- Sales Growth
- Cost Reduction
- Quality Metrics
- Safety
- Profitability

### 5.4.2. Quality Management System Planning

By means of the formal planning processes described in 5.4, Fisher Controls International LLC
executive management assures:
• Processes needed for the management systems and their applications throughout Fisher are identified.
• Processes are sequenced in a timely and interactive fashion, so as to assure that the criteria and methods needed have been determined and the operation and control of the management processes are effective.
• Required resources and information necessary to operate the business successfully; and Processes to monitor, measure, and analyze the business management systems are implemented to achieve the planned results and continual improvement of the business and its management systems.

Evidence of the planning process is maintained in the form of presentation documentation, meeting minutes, and reports, which are made available through executive management, as well as goals and objectives stemming from the planning processes that have been documented. Additionally, when changes to the business management systems are anticipated, they are planned and implemented in a fashion that assures the integrity of the business management systems and provide for a smooth transition.

5.5. Responsibility, Authority, and Communication

5.5.1. Responsibility and Authority

Management at all levels of Fisher Controls International LLC shall be responsible for the activities under their control as defined by the organization charts contained herein, and as delegated throughout the Fisher locations worldwide and described within their respective Quality Manuals and organizational descriptions.

Management at each Fisher location shall establish management systems which ensure conformance with industry standards, jurisdictional regulations, company policy, as well as customer and supplier contractual requirements.

5.5.2. Management Representative

The Director of Quality, Fisher Worldwide, has been appointed as the Management Representative with the responsibility and authority to:

• ensure that processes needed for the quality management system are established, implemented, and maintained,
• report to the President, Fisher Controls International LLC on matters concerning the performance of the quality management system and need for improvement, and
• ensure the promotion of awareness of customer requirements, industry standards, and jurisdictional regulations throughout Fisher.

The Director of Quality, Fisher Worldwide, shall be supported through the appointment of management representatives at each Fisher location responsible for providing products and services to customers.
The Director of Quality, Fisher Worldwide, and other appointed management representatives shall further be authorized and have the organizational freedom to:

• Identify quality problems
• Initiate actions that result in solutions to these problems
• Verify implementation of solutions to those problems
• This authority includes the limitation and controlling of work when necessary.

The Director of Quality, Fisher Worldwide, and other appointed management representatives are not to be overridden by other company divisions, departments, or managers.

In the event of an impasse between the Director of Quality, Fisher Worldwide, or other appointed management representatives, and other divisions, departments, or managers, the President, Fisher Controls International LLC shall be the arbitrator and his decision will be final and binding to all parties within Fisher.

This responsibility and authority is evidenced by the approval of this manual by the President, Fisher Controls International LLC.

5.5.3. Internal Communication

Organizational effectiveness and business growth is a direct result of creating an environment that encourages employees. In support of creating this positive environment, Fisher Controls International LLC communication’s strategy focuses on the following key areas:

• **Enrollment of People:** Communication of business results, strategies, policy, benefits changes, and special recognition of significant accomplishments.

• **Employee Involvement and Feedback:** Avenues for all employees to share their thoughts, concerns, and suggestions to any person in the organization. This also includes the utilization of cross-functional and natural work teams.

• **External Communication:** Establishing a bridge between our customers, suppliers, community, and our employees.

This strategy facilitates communication at all levels and in all directions of the organization. Managers have the responsibility to ensure that information flows in accordance with this strategy and all employees share accountability for communicating.

Fisher’s philosophy will also center on developing values and behaviors which foster high-performing individuals, teams, and organizations. The following values are inherent in our business and communications philosophy:

• **Truth:** Openly sharing information, ideas, and thoughts.

• **Accountability:** Accepting the consequences of choices and learning from our mistakes.
• **Support**: Encouraging each other’s personal and professional growth.

• **Trust**: Knowing, with confidence, that our employees have the company’s best interest at heart.

• **Energy**: Being motivated to devote our best efforts to perform.

Communication is everyone’s responsibility and effective communication will be achieved only if everyone participates. Responsibility for communication varies depending upon one’s role in the organization. These are outlined below:

**President and Vice Presidents**

- Provide leadership in communicating business direction and strategy
- Sets the expectation that communication is critical to the success of the Fisher business and, therefore, everyone is expected to participate in the communication process
- Communicates with individuals at all levels of the organization

**Human Resources**

Same as President, as well as:

- Continually monitor employee morale and provides feedback to the President
- Listens for the changing needs of individuals in the organization
- Explores and provides training in areas such as diversity, sexual harassment, and other areas

**Directors/Plant Managers**

- Provide timely communication of progress to achieve business results
- Translate business direction and strategy so that the function understands its role and contribution to the whole
- Eliminate blindness in the organization by communicating business direction throughout the organization
- Continually monitor employee morale and provide feedback to the President and Human Resources
- Establish strong relationships with other functions in order to ensure consistency in direction

**Managers/Supervisors**

- Translate business direction into specific tactics to be achieved by each department
- Communicate progress to targets at departmental and company level
- Gather feedback from employees at all levels of the department and provide feedback to Human Resources
- Communicate with departments to ensure consistency
- Provide reasoning behind decisions or changes that are made
Employees

- Listen to the rationale behind decisions that are made
- Share concerns and ideas with manager/supervisors/team leaders
- Ask questions regarding expectations and direction
- Give feedback to manager/supervisor on communication style
- Initiate career planning discussions

Each year, the Vice President of Human Resource shall prepare communication plans for each area of responsibility together with the timing of these plans. Communication plan objectives for the year are also outlined. A communication plan checklist shall be completed to assure effective communications throughout Fisher.

5.6. Management Review

5.6.1. General

Management review is accomplished by a variety of activities that take place throughout the year.

Executive management having planned the policies, goals, and objectives as a result of the planning processes discussed in paragraph 5.4, and having communicated these policies, goals, and objectives throughout the organization as described in paragraph 5.5.3, requires that management within Fisher Controls International LLC report on the status of these policies, goals and objectives, as well as reporting on the suitability, adequacy, and effectiveness of the management systems.

The following management review activities take place as a minimum:

- **Management Monthly Reports** – Provide a vehicle to pass critical information through each level of management.

- **Staff Meetings** – Management meetings that take place at each level of management and provide the opportunity to communicate from top down and bottom up. The Fisher Management Representative will periodically report on the implementation and effectiveness of this Quality Management System and make recommendations for improvement at the Fisher Executive Management Staff meetings.

- **Operation Reviews** – Management meetings that take place at each site and provide executive management a report on the progress of goals and objectives that have been established by each functional area at the site.
5.6.2. Review Input

These management review activities take into account information from the following:

- results of audits,
- customer feedback,
- process performance and product conformity,
- status of preventive and corrective actions,
- follow-up actions from previous management reviews,
- changes that could affect the quality management system, and
- recommendations for improvement.

5.6.3. Review Output

As a result of the management review, activities, decisions, and actions from management are formulated for many areas of the business including:

- improvement of the effectiveness of the quality management system and its processes,
- improvement of product related to customer requirements, and
- resource needs.

Records of management review are maintained in the form of documented monthly reports, staff meeting minutes, operation review presentations, planning conference, profitability review, technology and organization review presentations, and other meeting minutes.

Supporting Fisher Procedures

Fisher General Specification - FGS 15B15.12 – Management Review

6. RESOURCE MANAGEMENT

6.1. Provision of Resources

Fisher Controls International LLC considers, plans, and arranges to provide Human and Infrastructure Resources during the Organization Review and Profitability Review planning processes described in 5.4. Resource systems have been established to permit management to requisition both the Human and Infrastructure Resources needed to operate the business and taking into consideration those resources necessary to:

- implement and maintain the quality management system and continually improve its effectiveness
- enhance customer satisfaction by meeting customer requirements.
6.2. Human Resources

6.2.1. General

Human resources are provided by means of the Personnel Requisition system for salaried employees. Personnel Requisitions are prepared by the hiring manager to fill vacancies and to add salaried employees where an identified human resource is needed. The Personnel Requisition requires approval by upper management prior to the position being filled. Hourly employee positions are filled based on authorized Manning levels, the hiring manager’s request, and the site/service manager’s approval.

Headcount is reported by Human Resource Management on a monthly basis and is monitored by executive management to assure human resource goals and objectives are met based on the headcount plans developed during the Organization Review and Profitability Reviews. Employees are hired, transferred, and promoted based on their ability and willingness to effectively apply required knowledge and skills to fulfill job descriptions as assessed by the responsible manager. Job descriptions are prepared and maintained by Human Resource Management. Job descriptions outline the requirements of the position and the minimum education, training, skills, and experience needed to fulfill the position.

6.2.2. Competence, Training, and Awareness

Fisher Controls International LLC Management is responsible for the competency, awareness, and training of the employees who report to them. Based upon job descriptions, employees are reviewed on an annual basis to aid in communicating whether they are competent in their performance - in accordance with their job descriptions and other goals and objectives that may have been assigned by their respective management.

Salaried employees are reviewed against goals (i.e. Management By Results-MBR, My Annual Plan-MAP, Performance Management Process-PMP, etc.) which set forth requirements for performance based on goals and objectives that have been established by executive management and driven down into the organization. Salaried employee goals and objectives are developed in support of the business goals and objectives set by executive management. These reviews are documented on a performance evaluation worksheet and summarized on a results review. Reviews are also performed which provide employees the opportunity to express their desires and ideas for career growth. Hourly employees are reviewed against their respective job descriptions and performance expectation. These reviews are documented on a performance evaluation form. In either case, training needs and development plans are documented when appropriate and evaluated for effectiveness at the time of performance reviews or sooner, as the situation warrants. These reviews provide management with the opportunity to ensure that employees are aware of the relevance and importance of their activities and how they contribute to the achievement of the business and quality objectives.

Human Resources Department maintains employee records of performance reviews, education, skills, and experience. Department managers are responsible to assure that training records specific to an employee’s job are maintained.
Fisher provides employees the opportunity to improve their competence, training, and awareness by offering in-house training seminars, off-site participation in training seminars, and educational reimbursement benefits. On-the-job training is provided to newly hired, part-time, and temporary employees during the initial period of their employment. Training is provided to ensure employees are competent in performing their assigned tasks, general orientation, and applicable procedures and documents within the quality management system. Training related to products and safety is provided, as appropriate, to employee assignments. Specific training is documented. However, much of what an employee learns is by exposure to the job and activity in which they are involved.

**Supporting Fisher Procedures**

Fisher General Specification - FGS 15B15.11 – Quality Assurance Employee Training

**6.3. Infrastructure**

Fisher Controls International LLC determines, provides, and maintains the infrastructure needed to achieve product conformity and continue to improve business operations. This infrastructure includes, as applicable:

- buildings, workspace, and associated utilities,
- process equipment (both hardware and software), and
- supporting services (such as transport, communications, or information systems).

Infrastructure is supported for by means of the capital appropriation request process. Each year during the profitability review, a percentage of the total sales dollars are set aside for capital spending.

Capital planners at each Fisher location prepare a list of items desired to run and improve the business. These lists are compiled, reviewed, and prioritized. Capital appropriation requests are submitted for approval based upon authorization levels and resources. Funds are authorized for capital spending in accordance with the capital plans. A contingency reserve is maintained for unforeseen projects, as they become necessary.

**6.4. Work Environment**

Fisher Controls International LLC is committed to providing a safe, healthful work environment for its employees and the communities in which we do business. Likewise, Fisher provides for the necessary environments needed to produce products within those environments necessary to achieve requirements (i.e. office facilities, clean rooms, calibration and inspection rooms, special process facilities – paint, welding, heat treatment, etc.). Environmentally controlled facilities used to meet product requirements are monitored and maintained to assure conformity.
7. PRODUCT REALIZATION

7.1. Planning of Product Realization

Fisher Controls International LLC has planned and developed the processes needed for the design, manufacture, and service of valves, actuators, and instruments. As a result of this planning, responsibilities for the execution of various product realization processes have been assigned throughout the Fisher locations.

The purpose of this Manual is to outline the processes carried out by Fisher as opposed to those processes which have been assigned to the Manufacturing Plants locations throughout the world. The Fisher processes consist of the following as related to ISO 9001:

- 7.2 Customer Related Processes
- 7.3 Design and Development
- 7.4 Purchasing – 7.4.1 Purchasing Process – as it relates to the 2nd paragraph – Evaluation and selection of suppliers and 7.4.2 as it relates to the establishment of technical and quality requirements
- 7.6 Control of Monitoring and Measuring Equipment – as it relates to the Research and Engineering Laboratories located in Marshalltown, Iowa; Singapore, SI; WuQing, China; and Cernay, France

Manufacturing Plants are responsible to identify, describe, and control those Product Realization processes for which they have direct responsibility. These processes shall be carried out in accordance with the requirements of ISO 9001, as a minimum.

In planning product realization, Fisher Controls International LLC has determined the following, as appropriate for the valves, actuators, and instruments being provided to our customers:

- quality objectives and requirements for the product;
- the need to establish processes, documents, and provide resources specific to the product;
- required verifications, validations, monitoring, measurement, inspection and test activities specific to the product, and the criteria for product acceptance;
- records needed to provide evidence that the realization processes and resulting product meets requirements (see 4.2.4).

Supporting Fisher Procedures

General Practice – GP 1 – New Product Development Process
7.2. Customer – Related Processes

7.2.1. Determination of Requirements Related to the Product

Sales and Marketing are responsible for the determination of the requirements applicable to the product.

Fisher Controls International LLC utilizes Sales Representatives, within defined territories throughout North America, Asia, and parts of Europe; and Fisher Field Sales Offices in Asia-Pacific, Europe, Middle East, Africa, and Latin America to offer customers products and services provided by Fisher.

Sales Representatives are independent businesses contracted by Fisher Controls International LLC to promote and pursue opportunities in the solicitation of orders for Fisher products and services. Customer orders shall be promptly transmitted to Fisher and shall be subject to the written approval and acceptance of Fisher. In no event shall the Sales Representative accept any order or otherwise attempt to bind Fisher in any transaction unless specifically authorized by Fisher.

Although the Sales Representative is a key link between Fisher and the ultimate customer, this Quality Management System does not extend to the activities of the Sales Representative or to their interfaces with the customer. The activities included within these paragraphs are to provide a better understanding of how Customer Orders are received by Fisher.

Fisher Field Sales Offices are company operated facilities which promote and pursue opportunities in the solicitation of orders for Fisher products and services. Customer Orders are reviewed and entered directly within these offices.

The Sales Representatives and Fisher Field Sales Offices are responsible for defining and documenting product or service requirements as specified by the customer, including delivery and post delivery activities, requirements not stated by the customer but necessary for specified or intended use as known, statutory and regulatory requirements applicable to the product, any additional requirements considered necessary by the organization, reconciling differences between the order requirements and the quotation, and acknowledging the Fisher capability to meet customer order requirements.

7.2.2. Review of Requirements Related to the Product

Director Project Management & Order Administration – North America, Customer Order Fulfillment Director – Europe, and Order Management Director – Asia Pacific are responsible for order entry.

The Customer Request for Quotations is reviewed by the Sales Representative/Fisher Field Sales Office. The Sales Representative/Fisher Field Sales Office prepares an offer of products and services to the customer via quotations based on the product catalogs and Price Books OED I & II or specific requirements to the customer request. Pricing and delivery information is included.

The customer reviews the offer in the form of the Quotation and is responsible to determine if the product being offered is suitable for the service in which it is to be applied.
Upon acceptance of the Fisher Quotation, the Customer places their Purchase Order. Customer Purchase Orders are reviewed by the Sales Representative/Fisher Field Sales Office prior to Order Entry. This review ensures that:

- product requirements are defined,
- contract or order requirements differing from those previously expressed in the quotation are resolved, and
- Fisher has the ability to meet the defined requirements.

Factory Quotation Support: Fisher sales support or Marketing Associates are responsible for supporting the Sales Representative/Fisher Field Sales Office order inquiries specific to contract terms and conditions, quotation of unpublished pricing, definition of non-standard product structure and other associated order requirements not published in Order Entry Documents I & II. Sales Support communicates documentation of contract requirements and agreements to the Sales Representative/Fisher Field Sales office.

The Sales Representative/Fisher Field Sales office retains a copy of the customer’s purchase document.

Commercial orders are entered into a computerized network by the Sales Representative/Fisher Field Sales Office or by Order Entry if hard copy orders are received. The Sales Representative/Fisher Field Sales Office conducts product selection through reference of catalog numbers and product options. Where catalog selections have not been established for products, the specific customer requirements are described in note fields during the entry process.

**Standard Product Entry**

The selection and computer entry of the appropriate catalog product description causes the computer validation and processing of the order requirements, which results in the creation of a Sales order/Requisition/Order Write-up.

**Nonstandard Product Entry**

Requirements for unstructured product, product service notes, inclusion of a special requirement in a note field, etc. require manual intervention in the order processing system. Order processing is stopped until a manual review of the entry is completed and the product description is determined. Once completed, the entry is entered in the computer system and the Sales order/Requisition/Order Write-up is completed.

In case of Special orders, the customer’s technical requirements (customer purchase order, specification sheets, design specification, etc.) must be forwarded to the respective Order Management Department in the applicable world area for review at the time of order entry.
Order Review

Order Review is performed by an Order Entry Associate prior to release of the order to the Manufacturing site. The Manufacturing site receives the Sales order/Requisition/Order Write-up and confirms the planned ship date in OPS or other electronic order entry system which generates a confirming Order Acknowledgment to the Customer and the Representative/Fisher Sales Office.

The Order Acknowledgment includes the ship date for each item and a description.

The Sales order/Requisition/Order Write-up records the results of the contract review process and forms the basis for the Order Acknowledgement.

The Sales order/Requisition/Order Write-up is released to the Manufacturing Site responsible for production to begin.

Amendments (Changes) to the Customer’s Order

Amendments and changes to the Customer’s order shall be processed in the same manner as the original customer order. Changes initiated by the customer shall be processed through the Sales Representative/Fisher Sales Office. Changes recommended by Fisher shall be communicated to the Customer by the Sales Representative/Fisher Sales Office for Customer acceptance and amendment of the customer’s purchase documents. Changes shall be communicated and documented by revision to the Sales order/Requisition/Order Write-up entered by the Sales Representative/Fisher Sales Office and confirmed by Order Acknowledgement.

Supporting Fisher Procedures

Order Entry Procedure Guide

7.2.3. Customer Communication

Sales and Marketing are responsible for Customer Communication.

Fisher Controls International LLC has determined and implemented effective arrangements for communicating with the customers in relation to:

(a) Product information

- Product information is communicated by means of Internet Web Page Information (www.emerson.com). Product information is advertised through Emerson’s corporate advertising ads in major business and trade media including television, printed outlets, and airport displays.
- Printed product publications are provided to the customer through a worldwide network of Sales Representatives and Fisher Field Sales Offices. Product literature which provides details about each product offered is prepared by Product Managers and Engineers.
(b) Inquiries, contracts or order handling, including amendments

- Sales Representatives and Fisher Field Sales Offices are strategically located in major business areas worldwide. They are staffed with professional and trained sales associates to work with customers in assisting them with the selection of the correct products for their applications.

(c) Customer feedback, including customer complaints

- Customer surveys are conducted periodically to provide the customer an opportunity to communicate on products and services.
- Independent, competitive surveys are reviewed to obtain customer sentiment and overall competitive ranking.
- Sales Representative and Fisher Field Sales Office meetings provide an opportunity to communicate customer satisfaction.
- A Sales Representative Council has been formed in North America for periodic meetings with executive management.
- Customer visits and audits provide opportunities for customers to discuss expectations and satisfaction. The results of visits are documented in audit reports and meeting minutes and reported to executive management through monthly reports.
- The Fisher Customer Support Network and Field Service Reporting System have been established to improve Fisher’s ability to identify, resolve, and archive field problems encountered by customers. The processes enable responsive warranty and goodwill claims and provide the ability to respond quickly to customer hardware problems. The system provides statistical data for analysis and provides a basis for corrective and preventive actions to be formulated.

Supporting Fisher Procedures


7.3. Design and Development

The Executive Vice President, Fisher Business Units is responsible for Design and Development.

Fisher Controls International LLC has established procedures to control and verify the design of products to ensure that the specified requirements are met. The activities included in this process include new design and redesigns or modifications to existing designs. Design activities are carried out at a number of Fisher locations in each world area. Fisher Engineering Standard ES-119 or ES-269 shall be used as a basis for the Design and Development controls throughout Fisher. This Engineering Standard may be modified by the local Engineering Management responsible for engineering activities at their location provided the intent of the Engineering Standard is not diluted and the requirements of this Quality Management System Manual and ISO 9001 are satisfied.

Fisher also uses a Phase/Gate process to provide a structure for consistent new product development. The basis of the process consists of Phases and Gates that forces pre-defined deliverables in each Phase to be completed before entering the next Phase. The Phases consist of cross-functional teams executing actions to meet pre-defined deliverables within a specified
timeframe. Gates are meetings designed to review the progress of the new product. The Phase/Gate process is flexible and can be modified to meet the needs of the business/product and is described in GP 1 and visually represented in figure 8 below.

Figure 8. Phase/Gate process in place at Fisher Controls International LLC.

7.3.1. Design and Development Planning

A Design Plan shall be prepared by a Project Engineer/Project Team at the beginning of the design work. The Design Plan shall be prepared, reviewed, and revised in accordance with the applicable Engineering Procedure. The Design Plan shall include a listing of Project Engineers or Project Team Members, outline of the design and development activities, outline of verification activities to assure product conformance to the Technical Specification, and identification of responsibilities for each activity.

Design control measures, to identify and control design interfaces, shall include the establishment of participating organizations for the review, approval, release, distribution, and revision of documents.

7.3.2. Design and Development Input

Design input requirements are derived either from customer order requirements or marketing requirements. At the beginning of the design project, the design-input requirements, including applicable statutory and regulatory requirements, shall be translated into a Technical Specification developed by Engineering. The Technical Specification shall be of sufficient detail to permit the design activity to be carried out correctly and to provide a consistent basis for making design decisions, design changes, and to be used as a design verification checklist. The Technical Specification shall be developed, reviewed, approved, documented, and included in the project file.

7.3.3. Design and Development Output

The Project Engineer or Project Team shall be responsible for documenting the design output in terms of requirements, calculations, and analysis. Design output shall be in sufficient detail to permit design verification, identify assemblies and components that are part of the product design, and show conformance to the Technical Specification requirements and the design inputs.
Documentation shall include reference to production performance testing and inspection requirements and acceptance criteria. It shall also show conformance to appropriate statutory/regulatory requirements and identify characteristics of the design that are crucial to the safe and proper functioning of the product. The requirements for documentation are contained in applicable Engineering Procedures.

Design analysis shall be performed in a planned, controlled, and documented manner. Design analysis documents shall be legible and suitable for reproduction, filing, and retrieval. They shall be sufficiently detailed in regards to purpose, method, assumptions, design input, references, and units such that a person technically qualified in the subject can review and understand the analysis and verify the adequacy of the results without recourse to the originator.

Documentation of design analysis shall include the following:
- Definition of the objective of the analysis
- Definition of design inputs and their sources
- Results of literature searches or other applicable background data, when used
- Identification of assumptions and indication of those that must be verified as the design proceeds
- Identification of calculations (e.g. computer programs used, revision level, inputs, outputs, reference to computer program verification)
- Review and approval dates

Calculations shall be identified by subject, originator, reviewer, and date. When computer programs have been utilized in the preparation of calculations, the program shall have been verified to show that it produces correct solutions for the encoded mathematical model.

The computer program used for the preparation of calculations shall be controlled in accordance with an approved Engineering Procedure. When changes to previously verified programs are made, verification of the changes shall be performed by the program controller and documented in the change records section of the program documentation file along with the reason for the change.

7.3.4. Design and Development Review

Design reviews are conducted prior to the completion of the design process. Design reviews are conducted and documented in accordance with the requirements for Design Approval described in ES94. Design approvals shall be conducted by representatives of the function concerned with the design phase being reviewed. Design approvals shall be maintained by Engineering with the applicable design records.

7.3.5. Design and Development Verification

Design verification is the process of reviewing, confirming, or substantiating the design by one or more methods to provide assurance that the design outputs meet the specified design inputs and performance requirements. The requirements for design verification are described in ES118. The Project Engineer shall identify and document the particular verification methods to be used. Acceptable methods include, but are not limited to:
• Technical Assessment Process (ES238)
• Failure Modes and Effects Analysis
• Alternate Calculations
• Testing

The verification method and result shall be documented in the project file. The verifier shall be an Engineer competent in the applicable field of design. Verification may be performed by the originator’s supervisor provided the supervisor did not specify a singular design approach or rule out certain design inputs used in the design. Identification of the verifier and the date verified shall be included in the project file.

### 7.3.6. Design and Development Validation

Design validation is conducted in accordance with specified product test procedures. Test procedures are prepared by Engineering to comply with defined user needs and to applicable codes and standards appropriate to the product offering. Engineering specifies Special testing requirements when required and agreed upon with the customer. Design validation requirements shall be specified within the technical specification developed by Engineering. Records of the results of validation and any necessary actions shall be included in the project file.

### 7.3.7. Design and Development Changes

Changes to engineering drawings and other engineering documents shall be identified, reviewed, and approved by authorized personnel prior to their implementation in accordance with applicable engineering procedures. The review of design and development changes shall include evaluation of the effect of the change on constituent parts and product already delivered. Records of the results of the review of changes and any necessary actions shall be maintained.

**Supporting Fisher Procedures**

- Engineering Standard - ES 119 - Design Control Requirements
- Engineering Standard - ES 235 - Product Safety - Fisher Valve Division
- Engineering Standard - ES 196 - Requirements for Technical Approval of Buyout Products
- Engineering Standard – ES94 – Design Review Committee
- Engineering Standard – ES118 – Design Verification for Valve and Regulator Components
- Engineering Standard – ES238 – Technical Assessment Process
7.4. Purchasing

Fisher Controls International LLC World Wide Global Supply Chain is responsible for the evaluation and selection of suppliers who provide material, parts, and services to multiple Fisher locations. The Vice President - Fisher Global Supply Chain is responsible for these activities. However, each Manufacturing Site may evaluate and select suppliers based on their individual needs. Suppliers evaluated and selected by Worldwide Global Supply Chain or by a Manufacturing Site may be used by any other Fisher location for the materials, parts, and services they were qualified to provide.

The responsibility to place purchase orders resides with the Fisher Business Unit Manufacturing Site.

7.4.1. Purchasing Process

Fisher Controls International LLC has established purchasing processes that ensure purchased product conforms to specified purchase requirements.

Supplier selection shall be based on their ability to meet the following:

- technical and quality requirements
- delivery requirements
- cost requirements
- business stability and financial position

Supplier selection shall be controlled in accordance with Fisher – Corporate Fisher Procurement Procedure (FPP). Supplier evaluation and selection shall be based on their ability to meet procurement requirements, including quality systems and specific quality and technical requirements. The type and extent of control over the supplier shall be dependent upon the type of product, the impact of the supplier product on the quality of the final product, and on the quality records of previously demonstrated capabilities and performance. Criteria for the selection, evaluation, and re-evaluation are described within the Fisher – Supplier Quality Manual. Suppliers meeting these requirements are identified on a Fisher – Qualified Suppliers List or Manufacturing Site’s Qualified/Approved Suppliers List.

Records of the results of supplier evaluations and any necessary actions arising from the evaluations shall be maintained.

Supporting Fisher Procedures

7.4.2. Purchasing Information

Fisher Controls International LLC Fisher Engineering shall be responsible for providing details about the technical and quality requirements for the procurement of material, products, and services.

Material, products, and services are procured through the issuance of a purchase order. The purchase order may take the form of electronic communication or paper communication, issued at the applicable Fisher Manufacturing Site.

Each purchase order shall describe the following information as applicable:

- Name and address of the supplier
- Part number and description or service description
- Type, size, class, material, reference codes and other descriptive requirements
- Applicable drawings, procedures, instructions, including revision levels
- Requirements for the quality documentation and certification
- Requirements for the qualification of personnel
- Requirements for purchased product verification at the supplier’s facilities by the Fisher Manufacturing Site and customers along with the method of product release
- Requirements for adherence to quality program standards applicable to the material, product, or service being procured

Each purchase order shall be reviewed for adequacy and approved by authorized purchasing personnel prior to its issuance.

7.4.3. Verification of Purchased Product

Fisher Controls International LLC Manufacturing Sites shall establish and implement inspection or other activities necessary to ensure that purchased products meet specified purchase requirements. These inspections or activities take place at the Fisher Manufacturing Site responsible for issuing the purchase order. The process shall be described within the Fisher Manufacturing Site’s quality management system manual and or procedures.

When a Fisher Manufacturing Site or customer requires that source inspection take place at the supplier’s facilities, the purchase order shall provide for the verification arrangements and describe the method for product release.

Verification by the Fisher Manufacturing Site or by the customer of materials, products, or services at the supplier’s facilities shall not relieve Fisher or the supplier of the responsibility to provided acceptable material, product, or service, nor shall it preclude subsequent rejection and corrective action. Furthermore, when the Fisher Manufacturing Site or the customer carries out source inspection at the supplier’s facility, the supplier shall not use this as evidence of effective quality control.
Supporting Fisher Procedures

Fisher Procurement Procedure - FPP-009 - New Supplier Approval Worksheet Procedure

7.5. Production and Service Provision

Fisher Controls International LLC provides for the production and service of products through Fisher Manufacturing Sites throughout the world. It is not the intent of this Quality Management System Manual to describe the controls and processes for these locations. However, Fisher Business Unit does require the controls and processes carried out at these locations are described within their respective Quality Management System Manuals and procedures and that the requirements set forth within this Manual and the ISO 9001 Standard be met, at a minimum.

7.5.1. Control of Production and Service Provisions

Fisher Controls International LLC Manufacturing Sites shall plan and carry out production and service provision under controlled conditions. Controlled conditions shall include, as applicable:

- the availability of information that describes the characteristics of the product
- the availability of work instructions, as necessary
- the use of suitable equipment
- the availability and use of monitoring and measuring equipment
- the implementation of monitoring and measurement
- the implementation of release, delivery, and post-delivery activities.

7.5.2. Validation of Processes for Production and Service Provision

Fisher Controls International LLC Manufacturing Sites use “Special” processes where the output cannot be verified by subsequent monitoring or measurement. These processes may include those where deficiencies become apparent only after the product is in use or the service has been delivered.

It is the policy of Fisher Controls International LLC to validate these processes in accordance with the following codes and standards, at a minimum:

**Welding** – welding procedures, welders, and welding operators shall be qualified in accordance with recognized international codes and standards as applicable to customer and regulatory requirements and as specified by Fisher Engineering.

**Non-Destructive Examination** – NDE procedures and personnel shall be qualified in accordance with recognized international codes and standards as applicable to customer and regulatory requirements and as specified by Fisher Engineering.
**Heat Treatment** – heat treatment when used in conjunction with welding shall be validated as part of the welding qualification process. Heat Treatment when used to obtain specified material properties shall be validated by the materials ability to achieve these properties in accordance with the applicable ASME, ASTM, or other recognized material specification codes or standards.

**Other Processes** – (such as painting, plating, coating and potting which may fall within the category of “Special” processes) – validated based on Fisher Engineering acceptance criteria described within applicable instructions, procedures, and specifications.

Validation shall demonstrate the ability of these processes to achieve planned results.

Fisher Controls International LLC shall establish arrangements for these processes including, as applicable:

- defined criteria for the review and approval of the processes,
- approval of equipment and qualification of personnel,
- use of specific methods and procedures,
- requirements for records, (see 4.2.4), and
- revalidation.

**Supporting Fisher Procedures**

Fisher General Specification – FGS 15B08.1 – Development and Operational Control of Welding Procedure and Performance Qualifications
Fisher General Specification – FGS 15B08.2 – Development and Operational Control of Welding Procedure Qualifications – Non-Code Parts
Fisher General Specification – FGS 15B19.3 - Positive Material Indentification (PMI) X-Ray Fluorescence Type Alloy Analyzers
Fisher General Specification – FGS 15B04.2 – Helium Leak Testing for Production Valves
7.5.3. Identification and Traceability

Fisher Controls International LLC requires that the Manufacturing Sites establish suitable means to identify product throughout the realization process. Quality Plans in the form of shop routings, travelers, job cards, and requisitions may be used to establish the identity and suitability of product as it proceeds through the realization process.

Inspection and test status of the product is to be identified and provide an indication of the conformance of the product with regard to the inspection and test requirements. In addition to the Quality Plans mentioned, other status indicators such as markings, authorized stamps, tags, labels, inspection records, and physical location may be utilized. Status may also be maintained on a computerized database.

Material traceability, as it relates to Fisher products, is associated with the ability to maintain identification of raw material to its corresponding chemical and/or physical analysis performed during the melting and pouring process. Material traceability is usually accomplished by the material manufacturer assigning a heat number or heat code to the material and identifying the material with the corresponding number.

Fisher Controls International LLC Manufacturing Sites shall maintain material traceability on pressure retaining parts used in valve assembly. Material traceability may be maintained on other product parts and material when specifically required by the customer order.

Fisher Controls International LLC has established policy that requires Fisher assembled product to be serialized by each Fisher Manufacturing Site prior to shipment to the customer to maintain product traceability. Serial numbers are to be affixed to the product and provide a means to identify the product to its associated manufacturing and engineering records.

Supporting Fisher Procedures

Fisher General Specification - FGS 7E5 – Product Serial Number System
Fisher General Specification – FGS 15B08.1 – Development and Operational Control of Welding Procedure and Performance Qualifications
Fisher General Specification – FGS 15B08.2 – Development and Operational Control of Welding Procedure Qualifications – Non-Code Parts
7.5.4. Customer Property

Fisher Controls International LLC requires that customer furnished material, equipment, special tooling, and/or test equipment be examined prior to use and that it be properly identified and protected from unauthorized use or disposition. Lost, damaged, malfunctioning, or deteriorated property shall be reported to the customer. Records shall be maintained. Customer property may include intellectual property and personal data.

Fisher Manufacturing Sites are to establish procedures which provide for the verification, storage, and maintenance of customer property until incorporated into finished product or no longer required and returned to the customer.

These procedures shall define:
- Positive identification and/or part number assignment
- Receiving inspection
- Storage appropriate to maintain the property

Lost, damaged, malfunctioning, or deteriorated property shall be handled in accordance with the Fisher Manufacturing Site’s nonconformance process.

Verification by Fisher Manufacturing Sites does not absolve the customer of the responsibility to provide acceptable property.

**Supporting Fisher Procedures**

Order Entry Document - OED II Series

7.5.5. Preservation of Product

Fisher Controls International LLC Manufacturing Sites have prepared procedures and/or instructions that provide for the preservation of product during internal processing and delivery to its intended destination. These procedures and/or instructions provide for the identification, handling, packaging, storage, protection and preservation of materials, parts, and assemblies as applicable to assure product conformity.

**Supporting Fisher Procedures**

Fisher General Specification - FGS 8A31 – Handling and Storage of Elastomeric Items
World Manufacturing Procedures - WMP Series - As applicable to the Preservation of Product
7.6. Control of Monitoring and Measuring Equipment

Fisher Controls International LLC – Through the use of drawings, procedures and instructions, Fisher Business Unit has established the monitoring and measurement procedures to be undertaken and the monitoring and measuring equipment needed to provide evidence of the conformity of product to determined requirements (see 7.2.1).

Fisher locations responsible for product development, manufacturing, testing, and service shall establish processes that ensure monitoring and measurement can and will be carried out in a manner that is consistent with the monitoring and measurement requirements set forth for each product.

Measuring equipment used to ensure valid results shall:

- be calibrated or verified, or both, at specified intervals, or prior to use, against measurement standards traceable to international or national measurement standards; where no such standards exist, the basis used for calibration or verification shall be recorded;
- be adjusted or re-adjusted as necessary;
- be identified in order to determine calibration status;
- be safeguarded from adjustment that would invalidate the measurement result, and
- be protected from damage and deterioration during handling, maintenance and storage.

Fisher locations shall assess and record the validity of the previous measuring results when equipment is found not to conform to requirements. Fisher locations shall take appropriate action on the equipment and product affected. Unsatisfactory results are to be documented and dispositioned via the Fisher location's nonconformance process.

Records of the results of calibrations and verifications shall be maintained.

Computer software, when used in the monitoring and measurement of specified requirements, shall be verified to determine that it is capable of satisfying its intended application prior to its initial use and reconfirmed as necessary. These verifications shall be documented.

Supporting Fisher Procedures

Engineering Standard - ES 243 - Control Standard for the Calibration and Use of Research and Engineering Lab Test and Measuring Equipment
8. MEASUREMENT, ANALYSIS, AND IMPROVEMENT

8.1. General

Fisher Controls International LLC plans and implements the monitoring, measurement, analysis and improvement processes needed to:

- demonstrate conformity to product requirements,
- ensure conformity of the quality management system, and
- continually improve the effectiveness of the quality management system.

The methods, including statistical techniques, which are planned to implement these processes, are described within the Fisher locations’ Quality Management Systems.

8.2. Monitoring and Measurement

8.2.1. Customer Satisfaction

Fisher Controls International LLC monitors information relating to customer perception and to whether Fisher Business Unit has met customer requirements in the following ways:

**Customer Support Network (CSN)** – The Fisher CSN system has been established to improve Fisher Business Unit’s ability to identify, resolve, and archive field problems encountered by Sales Representatives/ Fisher Field Sales Office and customers. This system enables improved responsiveness on warranty claims, goodwill claims, and product problem resolution. It relies upon the Sales Representative/ Fisher Field Sales Offices to play a key role in responding quickly to customer hardware problems. In addition to problems associated with the products and parts, the system has been designed to accommodate significant and/or recurring service and support concerns.

**Sales Representative/Fisher Field Sales Office Communication** – Fisher Business Unit has established an organization of Sales Representatives/Fisher Field Sales Offices who periodically meet with Fisher Sales Management and report on such issues as: Business Growth Potential, Key Customer Accounts, Best Practices, Customer Satisfaction, and general open discussions for improvement. Minutes of these meetings are taken to summarize the discussions and identify action items for improvement.

**Industry Publication Reviews** – Reviews are conducted by Fisher Marketing Management and provide customer feedback based upon surveys conducted by independent publications. This information is reported to Executive Management so improvement opportunities may be identified.

**Industry Group Goals Reviews** – Fisher Sales Development and Support Group is organized by Industry Groups that meet periodically with members of Executive Management to discuss customer satisfaction issues, and to identify opportunities for improvement, the status of which are reported via monthly reports.
Customer Audits – Fisher locations may be audited by customers periodically. These audits present an opportunity for Fisher Business Unit to better understand the expectations of customers and to improve communication. Audit findings and recommendations for improvement are acted upon via the corrective action and preventive action processes at each of the Fisher locations.

Informal Customer Satisfaction and Perception Feedback – Information is obtained from the following: Customer visits of the Fisher locations or Fisher employee visits to customer sites. Information arising from these visits is communicated via employee monthly reports and trip reports which are shared with management.

Formal Customer Satisfaction and Perception Surveys – Customer loyalty and satisfaction information is obtained periodically through surveys conducted by third party organizations. This information is reported to Executive Management so improvement opportunities may be identified.

8.2.2. Internal Audit

Director of Quality, Fisher Worldwide is responsible for the implementation of internal audits.

Fisher Controls International LLC locations conduct internal audits at planned intervals to determine whether the quality management system conforms to the planned arrangements for product realization, requirements of the ISO 9001 Standard, and quality management system requirements as set forth within Fisher Quality Management System Manuals and procedures and is effectively implemented and maintained.

The audit process is planned, and takes into consideration, the status and importance of the processes and areas to be audited, as well as the results of previous audits. The audit scope, frequency, and method are defined. Auditor selection and conduct of the audit ensures objectivity and impartiality of the audit process. Auditors shall not audit their own work.

The Management Representative/Quality Manager assigned responsibility to oversee the Fisher location and/or processes shall prepare a documented procedure that defines the responsibilities and requirements for planning and conducting audits, reporting results and maintaining audit records.

Fisher Business Unit management is responsible for the location and/or process being audited and shall ensure any necessary corrections and corrective actions are taken without undue delay to eliminate detected non-conformities and their causes. Follow-up activities shall include the verification of the actions taken and the reporting of verification results.

Fisher Controls International LLC has established Operation Excellence and Quality Management System Audits at scheduled intervals in order to determine in the areas of Quality, Environmental, Health, Safety, Lean Enterprise, and Operation Management expectations and requirements are fulfilled.

Product validation audits are also conducted at defined intervals to determine whether products are meeting engineering and production requirements defined by applicable Fisher Quality procedures and Engineering specifications.
Supporting Fisher Procedures

Fisher General Specification - FGS 15B15.8 - Divisional Operation Excellence Audits and Quality Management System Audits
Fisher General Specification - FGS 15B15.15 - Product Quality Validation and Audit Procedure
Fisher General Specification - FGS 15B84 - Auditor/Lead Auditor Qualifications
Fisher General Specification – FGS 15B15.6 – Corrective Action

8.2.3. Monitoring and Measurement of Processes

Fisher Controls International LLC monitors and measures the Quality Management System processes by tracking performance against goals and objectives set by Executive Management. Fisher Business Unit is able to demonstrate its ability to achieve planned results by monitoring the Quality Management System processes and reporting measurements to goals and objectives.

Fisher Management shall define measurement objectives appropriate to the activities for which they are responsible and shall report these measurements on a monthly basis. These measurements are to be reviewed by the Fisher location management. When planned results are not achieved, correction and corrective actions shall be taken, as appropriate, to ensure conformity of the products and improve the Quality Management System.

Goals and objectives are further defined at the Fisher locations to be meaningful to each employee. Measurement charts and graphs are utilized by Fisher locations for this purpose and are to be conspicuously posted in the work areas by management to provide employees information relative to their performance and the performance of the Quality Management System.

Fisher Business Unit has set goals and objectives to provide Executive Management the ability to monitor the performance of the Quality Management System. The following goals and objectives set by Fisher Business Unit include but are not limited to:

- Sales Orders
- Shipments
- Operating Profit
- Order Backlog
- Cash Management Targets
- On-Time Delivery to Customer Request and Acknowledgement Date
- Record-able Injury Rate
- Inventory Turns
- Cost of Goods Sold
- Scrap and Rework Cost
- Lead-time

8.2.4. Monitoring and Measurement of Product

Fisher Controls International LLC Manufacturing Sites monitor and measure the characteristics of the products to assure that product requirements have been met. Monitoring and measuring activities are
carried out at appropriate phases throughout the product realization process in accordance with quality plans. Monitoring and measuring activities include drawings, work instructions, procedures, routings, shop travelers, and order requisitions.

Product monitoring and measurements are carried out by the Fisher Manufacturing Sites at various phases depending upon the complexity and technical requirements of the product. Monitoring and measurements may take place at any phase. However, formal monitoring and measurement processes usually occur during Tryout Inspection, Receiving Inspection, In-process Inspection, Assembly and Test, and Final Inspection of the product.

Fisher Manufacturing Site Management is responsible to develop quality plans which provide the necessary assurance that products comply with the specified requirements set forth by the Customer, Engineering, and Quality. Manufacturing Engineering, in cooperation with Engineering and Quality is responsible for determining what characteristics of the product are monitored or measured and for the preparation of the quality plans.

Quality plans shall identify and define the manufacturing, assembly, test, and quality control requirements, and be described within the Fisher Manufacturing Site's quality program. Quality plans shall identify or make reference to the acceptance criteria applicable to the product, provide a record of acceptance by persons authorized to release product from various phases up to and including final release. Manufacturing personnel may carry out the required inspection and test activities and record the results. Personnel not directly responsible for the work being inspected monitor these activities.

Where the product fails to pass inspections or tests, the procedures for the control of non-conforming product shall apply.

Unless approved by the Fisher Manufacturing Site Quality Management, and where applicable by the customer, product shall not be released for shipment until the activities specified in the quality plans and/or product procedures have been satisfactorily completed and the associated documentation has been properly authorized. Records shall be maintained.

8.3 Control of Nonconforming Product

Fisher Controls International LLC Manufacturing Sites ensure that product which does not conform to product requirements is identified and controlled to prevent its unintended use or delivery. The controls and related responsibilities are defined within Fisher Manufacturing Site documented procedures.

Nonconforming product shall be reviewed in accordance with documented procedures and shall be dealt with in one or more of the following manners:

- reworked to meet the specified requirements,
- accepted under concession with or without repair,
- re-graded for alternative applications,
- rejected: returned to the subcontractor or scrapped.
Where required by contract, the proposed use or repair of product that does not conform to specified requirements shall be reported for concession to the customer or customer’s representative. The description of the nonconformity that has been accepted and repairs shall be recorded to denote the actual condition.

Repaired and/or reworked product shall be re-inspected in accordance with the original specified requirements.

When nonconforming product is detected after delivery or use has started, the Fisher Manufacturing Site shall take action appropriate to the effects, or potential effects, of the nonconformity as determined by the site Material Review Board and/or the Fisher Product Safety Committee.

Records of the nature of nonconformity and any subsequent actions taken, including concessions obtained, shall be maintained.

**Supporting Fisher Procedures**

Fisher General Specification - FGS 15B15.10- Control of Nonconforming Product

### 8.4. Analysis of Data

Fisher Controls International LLC has identified relevant data that is collected, analyzed, and reported to management. This data, and the information extracted there from, provides the ability to determine the suitability and effectiveness of the quality management system. The data provides management with information for evaluation so continual improvement of the quality management system may be implemented effectively.

Data is generated as a result of the monitoring and measurement processes discussed in section 8.2.3 of this Quality Management System Manual, and from other relevant sources deemed appropriate by management, and included within Management Review activities (section 5.6).

The data provides meaningful information for management to measure performance against established goals and objectives.

In addition to financial, environmental, safety, health, and other business related data, information is provided based on data analysis relating to:

(a) **Customer satisfaction/loyalty** (see 8.2.1) – in the form of Fisher On-Time Delivery, Lead-time, Market Share, Warranty, Goodwill, and third party customer survey results.

(b) **Conformity to product requirements** (see 7.2.1) – in the form of Fisher Scrap and Rework

(c) **Characteristics and trends of processes and products** – including opportunities for preventive action as a result of new initiatives, such as Lean enterprise techniques

(d) **Suppliers** – in the form of Supplier On-Time Delivery, Scrap and Rework
Data may be presented using techniques such as performance indicators, Pareto diagrams, charts, and graphs so as to transform data into meaningful information that shows trends or comparisons to expected results, to which management may respond.

8.5. Improvement

8.5.1. Continual Improvement

Fisher Controls International LLC is committed to continually improving the effectiveness of the quality management system through the use of the:

- Quality Policy - 5.3
- Quality Objectives - 5.4.1
- Management Review - 5.6
- Internal Audits - 8.2.2
- Analysis of Data - 8.4
- Corrective Action - 8.5.2
- Preventive Action - 8.5.3

Continual improvement of products, processes, and systems is an objective of each employee within Fisher, as set forth in the Quality Policy.

The effectiveness of the Quality Management System is determined by Fisher Business Unit’s ability to realize and achieve results by the attainment of goals and objectives set forth by Executive Management. Effectiveness is monitored and measured from information provided through data analysis and reported through management review.

The process of establishing goals and objectives, and identifying opportunities for improvement is a continual process made possible through the use of audit findings, data analysis, and management review. The cyclical process generally leads to corrective actions or preventive actions which re-establish goals and objectives, a continual improvement process.

8.5.2. Corrective Action

Fisher Controls International LLC is committed to eliminating the causes of non-conformities in order to prevent recurrence. Corrective actions are to be appropriate to the effects of the non-conformities encountered.

A documented procedure shall be prepared for each Fisher location and implemented by management at each location. The procedure shall define the requirements for:

- reviewing non-conformities (including customer complaints),
- determining the cause of non-conformities,
- evaluating the need for action to ensure that non-conformities do not recur,
- determining and implementing action needed,
recording the results of actions taken, and
reviewing the effectiveness of corrective action taken.

Fisher Controls International LLC shall have documented procedures for identifying and eliminating the causes of non-conformities in products, processes, or quality management system. Key features of the documented procedure(s) necessary to effectively implement corrective action include:

- clear and accurate identification of the process output concerned
- ability to identify problems in a timely manner and take appropriate action
- ability to identify in a timely manner, the initial recipient(s) of defective process outputs
- a summary of activities, findings, and recommendations associated with the corrective action prepared by a designated person
- an adequate and effective system for controlling corrective action, reviewed and challenged at defined intervals
- clear descriptions of the course of action, with designated responsible persons identified

**Supporting Fisher Procedures**

Fisher General Specification - FGS 15B15.6 - Corrective Action

8.5.3. Preventive Action

Fisher Controls International LLC is committed to eliminating causes of non-conformities to prevent their occurrence. Preventive actions are to be appropriate to the effects of the potential non-conformity. A documented procedure shall be prepared at each Fisher location and implemented by management of each location. The procedure shall define requirements for:

- determining potential non-conformities and their causes,
- evaluating the need for action to prevent occurrence of non-conformities,
- determining and implementing the action needed,
- recording results of action taken (see 4.2.4), and
- reviewing the effectiveness of the preventive action taken.

Fisher Controls International LLC shall have documented procedures for identifying and eliminating causes of potential non-conformities in products, processes, or the quality management system.

Preventive action is taken when a potential nonconformity is identified as a result of analysis of records and other relevant sources of information, such as the following:

- statistical process control documents,
- complaints from customer or other sources,
- purchased items, rejected on receipt, that need rework; and
- internal and supplier products, processes, and quality management system information.
Information on preventive actions collected is an integral part of the management review process to maintain and improve the effectiveness of the quality management system. Some examples of preventive actions that are routinely implemented at Fisher locations are:

- Tryout parts processing for various forms of material
- Machine tool capability tryout and trial runs
- Actions as result of SPC information (process adjustments)
- Process qualification (i.e. plating, paint, heat treat, welding)
- Actions resulting from process improvement audits
- Research and development prototypes
- Action on audit recommendations not considered findings
- Six Sigma DMAIC problem solving and product/process improvement methodology
- Lean manufacturing initiatives
- Capital and resource planning process
- TPM (total preventative maintenance)
- Business system development and process mapping
- Establishment of quality management systems

**Supporting Fisher Procedures**

Fisher General Specification - **FGS 15B82** - Preventive Action
9. RELEASE/REVISION RECORD

Release/Revision: A - E

Date: March 11, 2011
Written by: See Signature Page 1
Approved: See Signature Page 1
Date Approved: March 11, 2011
Department: Global Quality Assurance


Revision: F
Date Revised:
Revised by: See Signature Page 1
Checked and Approved by: See Signature Page 1
Date Checked and Approved:

Reason: Added Release/Revision Record section. Updated Fig 1 to include global plant structure. Added Documentation Pyramid to Section 4.2.1. Changed references for following FGS 15B documents: 15B43 (Replaced by 15B15.2); 15B42 (Replaced by 15B15.1); 15B30.2 (Replaced by 15B10.2); 15B77 (Replaced by 15B04.1); 15B78 (Replaced by 15B04.2); 15B75 (Replaced by 15B08.1); 15B83 (Replaced by 15B15.8); 15B81 (Replaced by 15B15.6); 15B85 (Replaced by 15B15.10) Added references for following FGS 15B documents: 15B15.12; 15B15.11; 15B08.2. Removed reference to FGS 15B25, now referenced from Supplier Quality Manual FGS15B13.0. Updated Appendix A Organizational Chart. Removed reference to “Valve Division” or modified reference to “Fisher”.

Revision: G
Date Revised:
Revised by: See Signature Page 1
Checked and Approved by: See Signature Page 1
Date Checked and Approved:

Reason: Updated Fig 1 Jubail and Fisher India transferred to Global ISO Cert. Released FGS 15B15.13. Engineering Process Fig 5 – Technical Assessment changed from Decision to Process Flowchart Shape. Added Note to FGS15B45 reference in Section 4.2.2. Changed Manual & Quality Policy approval to President, Fisher Global Sales and Operations and President, Fisher Business Units. Updated title for position responsible for Design & Development Section 7.3. Changed Stage/Gate (Trademarked) references to Phase/Gate. Updated Fig 8 to latest Emerson NPD visual. Updated Title of ES119, ES251, ES235. Updated Appendix A Org Cart.
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Reason: Updated Fig 1 Fisher Stafford, USA. Compliance statement to ISO29001 requirements. Changed Manual & Quality Policy approval to President, Fisher. Updated Section 5.4 with Perfect Execution Review. Updated Section 7.3 with title for position responsible for Design & Development as well as referenced applicable new ES documents. Referenced OpEx audit and Product validation audit process in Section 8.2.2. Updated Appendix A Org Chart.
Appendix A:
Organization Chart: FISHER Business Unit (For latest version, contact Fisher Business Unit Human Resources department)