Integrated Support Services

- Contractor Management
  - US subcontracts about 15% of R&M activities, where Japan and Europe are double that.
  - Company’s culture and local environment determine plant contracting philosophy (level of contracting, skills to be contracted, amount of supervision)

  Philosophy determines contractor management process, consisting of contract negotiation, mutual understanding of success factors, agreed measurement system etc.

Key Elements

- Site leadership must develop contracting strategy
  - Identifies company and contractor employee roles and responsibilities
  - Should be understood by all site personnel and supported by the line organization

- Employee issues are recognized and resolved
  - Job security and impact on the community should be addressed
  - Perhaps a retraining and transition process needs to be in place
Key Elements (cont)

• Contractor Selection Process
  – Contractor capabilities aligned with business needs
  – Contractor selection is consistent with best practices and corporate guidelines
  – Expectations of each party is clearly defined
  – Copies of maintenance contracts are readily available
  – Qualification process/ background check

• Working relationship is built to support continuous improvement
  – Developed goals and objectives

Key Elements (cont)

• Management process that includes:
  – Management support
  – Adequate contract administrator and resources
  – Training contract administrators
  – Clear and defined contract administrator roles
  – Contractor orientation and training program

• Routine Measurement and Tracking of Contractors
Contractor Selection

• Desired Characteristics:
  – Appropriate management attitude
  – Ease of contracting
  – Response to calls
    Union or non-union experience
    Level of knowledge with TPM and TQM
  – Capability to accumulate appropriate resources
  – Synergy of organizations
  – Financial Strength
  – Corporate Vision/ Mission statement

Where to use Contractors

• Typical areas where contracting is considered:
  – HVAC
  – Organization of warehouses
  – Repair shop outsourcing and monitoring
  – Upgrade projects
  – Implementation of CMMS
  – Emergency work
  – Energy conservation program
  – Failure analysis coordination
Reasons to Consider Contracting Maintenance

- Meet Cyclical Workloads
  - Seasonal demand, major turnarounds, etc
- Meet the Needs for Low Skilled Work
  - Labor cost of employee is too high to perform work
- Meet the Needs for High Skilled Work
  - Work requires special skills or training and is performed infrequently
- Non-critical work is contracted out

Contractor Performance Measurement

- Percent Planned Work = planned hours worked / total hours worked
- Schedule Compliance = hours worked scheduled jobs / total hours scheduled
- Percent Preventative Maintenance Completion = PM hours completed / PM hours scheduled
- CMMS Usage
Maintenance Inventory and Purchasing

- 50% of all lost R&M hours are related to inventory and purchasing practices
- Areas to Evaluate to Accrue Improvement:
  - Purchasing policies, procedures, and accountability
  - Supplier qualification, systems contracts, etc
  - Level of urgent, emergency requisitions from maintenance
  - Approval process, levels of purchase requisitioning
  - Expediting Procedures

Stores

- Key is to strike a proper balance between materials availability and dollars in inventory
- Functions of Stores:
  - Administration
  - Receiving
  - Storing Inventory
- Stores provides R&M support by performing:
  - Building kits with parts, supplies, and rare tools
  - Locating parts, identifying broken parts
  - Reserving parts for jobs