INTRODUCTION

- Evolutionary Process has made "CHANGE THE ONLY CONSTANT"
- Changes in Technology, Customer’s needs and likings, Innovations, Economic, Social and Environmental Issues have forced organisations to re-orient/ re-organise themselves towards ever changing business scenario.
- Many organizations have achieved higher level of performance by adopting new ideas/, concepts. This is increasing expectations from customer continuously.

Quality Assurance.......

- Confidence to the customer that product/service delivered shall meet his requirements
- Planning to ensure defect free product or service
- Anticipating problems and providing for alternatives
- Warning signals during processing

Aspects of Quality Management

- Quality Planning
- Quality Control
- Quality Improvement

Definition of “Quality”

- Fitness for purpose or use
- Conformance to specified requirements
- The totality of features and characteristics of a product or service that bears on its ability to satisfy the stated and/or implied needs

New Definition of “Quality”

- Meeting and anticipating customer’s requirements, stated or implied
  - At a given time and over a period of time
  - At a price the customer can afford and is willing to pay
- Introducing new and better products into the market faster than competitor
- Continuously bringing down the cost.

The changing trend...

Six Sigma Quality
Total Quality Management
Quality Assurance Management - ISO 9000
Company wide Quality Control Management
Quality Control Management
Inspection Management
ISO 9000 on Purchasing Process

Purchasing

- Purchasing process
- Purchasing information
- Verification of purchased product

Purchasing process

- Ensure that purchased product meets requirements
- Type & extent of control depends on effect purchased product may have on product realization or the final product
- Evaluate and select suppliers based on their ability to supply conforming product
- Establish criteria for selection, evaluation and re-evaluation of suppliers
- Results of evaluation and any necessary actions must be recorded

TQM on Partnership

Building Partnerships

Excellent organizations seek, develop and maintain trusting relationships with various partners to ensure mutual success. These partnerships may be formed with customers, society, key suppliers, educational bodies or Non-Governmental Organizations (NGOs).

Need for Vendor Selection & Performance Monitoring

- Global market requires that our products and services are procured at
  - Competitive prices
  - High quality
  - Delivered on time
- Customer’s specific requirement.
- Broadening Supply Chain Management.
- Uniformity and transparency in approach.
- Increase in supplier base to have consistent and reliable quality conscious suppliers.

Key Aspects in Vendor Management

- Vendor Selection
- Vendor monitoring
- Vendor Performance Evaluation
- Vendor Audit
  i) Process improvement
  ii) Quality system improvement
- Feedback for Improvement
- Structured Vendors meet for
  i) Mutual understanding of objectives
  ii) Identification of Improvement areas

Supplier Registration process flowchart

System at a Glance

- Supplier Evaluation, Assessment and Review Procedure, in-house developed to bring in uniformity & transparency in procurement process.
- Defines induction procedure for suppliers in.
- Carefully chosen supplier is an asset to organization.
- Applicable for materials used in BHEL
  - Direct materials
  - Indirect materials
System at a Glance

- Well structured and documented procedure for registration of suppliers & contractors and monitoring of their performance.
- Annual advertisements in Newspapers for soliciting new suppliers.
- Requirement of additional suppliers for registration always available on web.
- Review for effectiveness of vendor selection system is being done every 3 years.
- Audit for compliance is done every year.

System at a Glance

- Direct materials are categorized (Critical/ Major/ Minor) based on types
  - Design – by BHEL/ Supplier
  - Technology – by BHEL/ Supplier
  - Raw Material – by BHEL/ Supplier
- Formation of
  - Supplier Development Cell (SDC)
  - Material Identification and Supplier Control Committee (MISCC)
  - Trained and Certified Assessor (TCA)
  - Supplier Registration Committee (SRC) – in Regions
- Product Material Directory (PMD) prepared by MISCC acts as mechanism for supplier control checks and includes their performance rating

Supplier Development Cell (SDC):

- Nodal agency for all activities related to supplier registration.
- Provide single window service to suppliers and liaise with other functionaries for evaluation, assessment, visit to suppliers’ works and registration activities.

Main roles of SDC :

- Pro-actively identifying new suppliers
- To ensure compliance of procedural guidelines during registration process
- To coordinate formation & deputation of supplier evaluation team as decided by MISCC.
- Registration of suppliers as per MISCC direction.
- To maintain and update Product Material Directory/ Supplier Directory based on MISCC recommendations.
- To maintain online records of supplier registration applications, registration status, Supplier Performance ratings (SPR) and record of supplier put on hold, delisted and banned.

Material Identification and Supplier Control Committee (MISCC):

- Cross function team for identification and categorization of materials, approval for registration of suppliers and other related activities.
- MISCC is empowered to take decisions on all matters related to registration of suppliers with the approval of its Chairman.

Role of MISCC:

- Preparation of Product Material Directory (PMD) for products/items.
- scrutinize the suppliers application / registration forms & Identification of the gaps in information .
- To decide team for site visit if required, along with terms of reference for scrutiny there at supplier works.
- Final review of Supplier Registration Form (SRF) and assessment report submitted by the Supplier Evaluation team and accordingly approval of registration of suppliers under different codes , or reject the applications.
- To undertake annual review of PMD for addition / deletion of items / suppliers and other PMD parameters.
- To periodically review Supplier Performance Rating (SPR) and other PMD parameters, identify non-responsive / inactive / ineffective suppliers and approve of deletion from PMD.

Trained and Certified Assessor (TCA):

- Evaluation and assessment of supplier registration forms and documents
- To participate in on-site supplier evaluation if required for organizational soundness, quality system along with other team member.
Supplier Registration Committee (SRC):

- In Power Sector Regions, all the functions of SDC & MISCC shall be carried out by a single committee called “Supplier Registration Committee” (SRC).
- SRC shall be constituted by Head of the respective Regions or any Executive (not below the rank of AGM) nominated by ED/Region Head and shall consist of representatives from subcontracting/purchase, finance, quality & concerned indenting department.

System at a Glance

- Suppliers are identified by various Codes
  - One time code
  - Trial code
  - Development code
  - Permanent code
- Supplier Registration process consists of
  - Information stage
    - Direct approach
    - Through Group/industry/technology etc.
    - Customer/colleague recommendation
    - Market scanning
    - Qualified in Open Tender
  - Assessment stage
    - Organizational soundness
    - Quality systems
    - Technical competence
  - Registration stage

System at a Glance

Supplier Performance Monitoring & Rating

- Supplier Performance Rating (SPR) is based on:
  - Quality Rating – Weightage 60%
  - Delivery Rating – Weightage 30%
  - Service Rating – Weightage 10%
- System provides transparency in dealing with suppliers in terms of communication, evaluation, feedback mechanism, performance ratings, hold/delist/banning
- Registration of contractors for BHEL Power Sector Regions is dealt separately.
- Suspension of business dealings as per MM guidelines

Vendor Selection – Key Features

Qualifying criteria for registration

- Foreign suppliers
  - Mandatory business rating report
  - Assessment by MISCC/TCA
- Contractors
  - Assessment based on
    - organizational soundness
    - quality
    - technical ability
  - Contractor is qualified for registration if qualified in all above three with minimum 60% in each criteria (Max 100%)

Vendor selection – Key Features

Qualifying criteria for registration

- Indigenous suppliers

<table>
<thead>
<tr>
<th>Sl. No</th>
<th>Criteria</th>
<th>Qualifying Marks</th>
<th>Marks Obtained</th>
<th>Recommendation for registration</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>Organisational soundness</td>
<td>50</td>
<td>30</td>
<td>Recommended: Permanent code/Development code/Trial code</td>
</tr>
<tr>
<td>2</td>
<td>Quality System</td>
<td>25</td>
<td>15</td>
<td></td>
</tr>
<tr>
<td>3</td>
<td>Technical Competence</td>
<td>25</td>
<td>15</td>
<td></td>
</tr>
<tr>
<td>TOTAL</td>
<td>100</td>
<td>60</td>
<td></td>
<td>Not recommended</td>
</tr>
</tbody>
</table>

*Minimum Qualifying Score in Each category shall be 60%*

REGISTRATION CRITERIA:

<table>
<thead>
<tr>
<th>Sl. No</th>
<th>Score</th>
<th>Recommendation</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>More than 90</td>
<td>Supplier is to be registered and given Permanent code. Normally no visit is called for.</td>
</tr>
<tr>
<td>2</td>
<td>75-90</td>
<td>Supplier may be visited and if recommended by MISCC, Supplier’s visit is mandatory. Both Permanent code will be given.</td>
</tr>
<tr>
<td>3</td>
<td>60-74</td>
<td>Supplier may carry out suggested improvements if advised by MISCC. Supplier’s visit is mandatory. Trial/Development code may be given.</td>
</tr>
<tr>
<td>4</td>
<td>Less than 60</td>
<td>Supplier is not recommended for registration.</td>
</tr>
</tbody>
</table>

SUMMARY:

<table>
<thead>
<tr>
<th>Sl. No</th>
<th>Criteria</th>
<th>Maxm Marks</th>
<th>Qualifying Marks</th>
<th>Minm Qualifying Score in Each category shall be 60%</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>Organisational soundness</td>
<td>50</td>
<td>30</td>
<td></td>
</tr>
<tr>
<td>2</td>
<td>Quality System</td>
<td>25</td>
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<td>Technical Competence</td>
<td>25</td>
<td>15</td>
<td></td>
</tr>
<tr>
<td>TOTAL</td>
<td>100</td>
<td>60</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

REMARKS:

- Signature of Evaluation Committee

QUALIFIED

NOT QUALIFIED
Part B: QUALITY

<table>
<thead>
<tr>
<th>Sl. No</th>
<th>PARAMETER</th>
<th>QUALIFICATION CRITERIA</th>
<th>EVALUATION BY BHEL</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Ability to deliver Quality Services in terms of Evidence of Quality Assurance within the Organisation on the basis of various information available in the application OR on reports from existing Sites OR reports from Previous Works.</td>
<td>1. Submission of Completion Reports.</td>
<td></td>
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<td></td>
<td>2. Worked satisfactorily with BHEL Units/Power Sector Regions for similar projects.</td>
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<td></td>
<td></td>
<td>3. CONTRACTOR having business with 3 or more Customers.</td>
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<td></td>
<td></td>
<td>4. Having continuous business for the last 3 years.</td>
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<td></td>
<td></td>
<td>5. Details of Business Dealing with BHEL.</td>
<td></td>
</tr>
</tbody>
</table>

NOTE: If any of the above 3 Qualification Criteria are met, the Contractor can be treated as Qualified for Part B.

QUALIFIED                                             NOT QUALIFIED

Remarks, if any:

Signature of evaluation committee:

Part C: TECHNICAL

<table>
<thead>
<tr>
<th>Sl. No</th>
<th>PARAMETER</th>
<th>QUALIFICATION CRITERIA (MANDATORY)</th>
<th>EVALUATION BY BHEL</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>BASIC REQUIREMENT</td>
<td>Code &amp; Category</td>
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<tr>
<td></td>
<td></td>
<td>i</td>
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Vendor Performance Rating

- Supplier Performance Rating (SPR) is done for each order executed based on the delivery, quality and after sales services of the supplier (Total 100 marks)

<table>
<thead>
<tr>
<th>Parameter</th>
<th>Weight</th>
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</thead>
<tbody>
<tr>
<td>Quality</td>
<td>60</td>
</tr>
<tr>
<td>Delivery</td>
<td>30</td>
</tr>
<tr>
<td>Service</td>
<td>10</td>
</tr>
</tbody>
</table>

Vendor Selection – Key Features

- Pre defined Supplier Registration Forms (SRFs) for organizational soundness, quality systems and technical competency
  - Indigenous Suppliers [SRF-(I)]
  - Foreign Suppliers [SRF-(F)]
  - Contractors (CRF)

Vendor Selection – Key Features

- Organizational information
  - Product/ systems/ services
  - Details for works and offices
  - Ownership information
  - Statutory information
  - Organizational strength
  - Manufacturing facilities
- Financial information
  - Audited balance sheet
  - Audited P&L account
  - Financial ratios
- Quality systems
  - Incoming material control
  - Process control
  - Testing facilities
  - Safety measures
  - Customer complaint handling
Vendor Selection – Key Features

SRF-I

- Technical competency
  - Design specific
    - Understanding of design and inspection
    - Process capability
  - Performance specific
    - Design capability
    - Process capability
    - Testing adequacy
  - Material specific
    - To be decided by MISCC

Vendor Selection – Key Features

SRF-F

- Organizational details
- Manufacturing and testing facilities
- Details of Indian representative, if any
- Bankers details
- Audited balance sheet and P&L accounts
- Quality management system
- Experience list/customer list
- Business rating report (Mandatory)

Contractor Selection – Key Features

CRF

- Organizational details
- Bankers details
- Ownership information
- Statutory information
- Audited balance sheet and P&L accounts
- Quality management system
- Experience list

Thank You