WRITING SPECIFICATIONS

Specifications fill several needs:

- Owner or Purchaser gets a chance to review proposed work or equipment purchase.
- Documentation needed for bidding purposes.
- Documentation to refer to when evaluating bid.
  - Technical specs met?
  - Contractual requirements met?
- Document that Contract is built around.
- Specification to be met during manufacture, delivery, and installation of equipment.


* Letters of Understanding (in executed contract)
* Contract Addendum (with executed contract)
  - Bidding Instructions
  - General Conditions
  - General Requirements (Standards, Typical Requirements)
  - Specific Requirements (site/application-specific)
  - Data to be provided with proposal
  - Appendices - drawings & other information
I. General Conditions
   A. Included Documents
   B. Definitions
   C. Intent of Contract Documents
   D. Ownership of Documents

II. Preliminary Matters
   A. Time to Commence Work
   B. Time starts to run
   C. Execution of Agreement

III. Surety Bonds

IV. Insurance

V. General Rules of the Contract
   A. Work by Owner and Others
   B. Legal restrictions, permits, and regulations
   C. Remedies not exclusive
   D. Prompt written notice of claim required
   E. Patents and Royalties
   F. Arbitration

VI. Contractor’s Responsibilities and Rights
   A. Supervision
   B. Duty to Examine and compare contract documents
   C. Subcontractors, suppliers, manufacturers
   D. Labor, Equipment, Materials, Workmanship
   E. Substitute Equipment or Materials
   F. Submittals
   G. Contractor’s right to stop work or terminate contract
   H. Indemnification

VII. Owner’s Responsibilities and Rights
   A. Communications with Contractor
   B. Owner’s right to correct or complete the work
   C. Owner’s right to suspend work
   D. Owner’s right to terminate contract
   E. Use of completed work
VIII. Engineer’s Status During Performance of the Work
A. Owner’s consultant
B. Role as Interpreter
C. Interpretations by Engineer
D. Visits to site
E. Authority to disapprove of reject defective work
F. Limitations of Engineer’s responsibilities.

IX. Additional, omitted, or changed work
A. Changes in the work
B. Changes in the Contract price.
C. Changes to the Contract time.

X. Rules Governing Acceptance of Work
A. Warranty and Guarantee
B. Access to the Work
C. Tests and inspections
D. Defective Work
E. Removal and replacement of defective work
F. Correction or repair of defective work
G. Acceptance of defective work
H. Correction of defective work during guarantee period

XI. Payments and Completion
A. Schedule of Values
B. Payments
C. Final inspection and acceptance
D. Final payment
E. Payments withheld
F. Contractor’s warranty or title
G. Waiver of Claims
H. Contractor’s continuing obligation
I. Interest (“legal rate in force”)
GENERAL REQUIREMENTS

Summary of Work
A. Description of Project
B. Work under this contract
C. Other Contracts

Administrative Matters
A. Initial Coordination Conference
B. Work Progress Schedule
C. Work Progress Reports
D. Compliance Submittals
E. Transmittal and Review of Compliance Submittals
F. Information to Manufacturer’s District Office
G. Delivery Schedule

Shipment of Equipment
A. Preparation
B. Marketing
C. Bills of Material
D. Delivery
E. Damage

Receipt and Unloading of Equipment and Materials

Storage of Equipment and Materials

Manufacturer’s Field Services
A. Contractor’s Field Representative

Exhibits (Reference to drawings or other attached or enclosed materials)
GENERAL REQUIREMENTS
(Technical part of equipment spec)

General
A. Description
B. Quality Assurance (Applicable Standards to be met)
C. Delivery
D. Job Conditions

Equipment and Materials
A. Materials
B. Base
C. Tank Assembly
D. Core and Coil Assembly
E. Insulating Oil
F. Oil Preservation System
G. Dial Type Indicators
H. Conduit and Wiring
I. Finish

Field Services
A. General
B. Tools and Test Equipment
C. Field Services Work
D. Statement of Readiness

SPECIFIC REQUIREMENTS APPLICABLE TO TRANSFORMER
General
A. Description
B. Application
C. Quality Assurance (Factory Tests)

Equipment and Materials
A. Ratings
B. Cooling Equipment and Controls
C. Load Tap Changer
D. Bushings
E. Surge Arresters
F. Current Transformers
G. Transformer Control Cabinet
H. Other Construction Details

DATA TO BE SUBMITTED WITH PROPOSAL
Dimensions, weight, shipping requirements, guaranteed specs, etc.