



***Pacific Gas and
Electric Company™***

T&D Document Development Handbook

Technical Document Management

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Introduction

Purpose

This handbook provides a set of procedures for developing or revising Transmission and Distribution (T&D) documents. These procedures apply **only** to the Operations, Maintenance, and Construction (OM&C), and Engineering and Planning (E&P) departments of the Utility Operations (UO) business unit. The procedures apply to **all** T&D policies, standards, guidelines, manuals, bulletins, and engineering design standards that meet the criteria listed on Page 2.

For the purposes of UO OM&C and E&P **only**, this handbook replaces the *UO Standard Developer's Handbook*.

(**Note:** The term "T&D" is used throughout this handbook. However, the procedures apply to all groups reporting to the vice presidents of E&P and OM&C. They do not apply to any groups outside of E&P and OM&C.)

When Does This Handbook Take Effect?

This handbook takes effect 1-1-02. Documents already under development will be "grandfathered" if they meet the following criteria:

- Policies, standards, or guidelines with Preliminary Needs Analyses approved by the UO Standard Committee **before** 1-1-02 that will be completed or implemented **before** 3-31-02.
 - All other documents or revisions submitted to Technical Document Management (TDM) **before** 1-1-02 that will be completed or implemented **before** 3-31-02.
-

The New Document Process

This handbook provides a new process for developing documents. The new process has two tracks.

- The first track covers documents that have significant impacts on safety, compliance, financial costs, training, and field practices. To determine what is a "significant impact," see "Criteria for Inclusion," on Page 2. See Page 3 for the procedure used to develop these documents. The new development process is more rigorous. It requires greater stakeholder involvement to provide a more thorough review and improved implementation.
- The second track is for documents with a lesser impact. Use the existing procedures in UO Standard S0500, "Processes for Authorized Documents," to develop these documents.

If proposals for new or revised documents originate outside of E&P and OM&C, check the following:

- Will there be an impact on E&P and OM&C?
- Does the impact meet the “Criteria for Inclusion” shown below?

If these documents meet the T&D triggers, they must go through the T&D development process. The T&D members of the UO Standard Committee are responsible for bringing these documents into the process.

Criteria for Inclusion

Review the following criteria. If a proposed new document or revision meets any **one** of the following triggers, the procedures in this handbook **must** be followed.

- The new document or revision involves a critical safety concern. Failure to develop and implement the document could cause or continue an unsafe condition.
- The new document or revision covers a critical compliance issue. Failure to develop and implement the document could result in violating a law or regulation.
- Failure to develop and implement the new document or revision could cause serious, negative, financial impacts.
- The new document or revision involves expenses for OM&C or E&P that will exceed \$500,000 annually. When estimating the anticipated costs, consider that even a small change may be costly. There may be substantial costs for training or distribution, for example.
- The new document or revision requires new procedures, tools, or systems that will substantially change current field practices.
- The new document or revision requires more than 1 hour of training per employee (for a large group of employees) or the training costs exceed \$200,000.
- The new document or revision requires ongoing, annual training.
- Developing or implementing the document or revision requires resources outside of OM&C and/or E&P.

Documents That Do Not Meet the Criteria Listed

For new documents or revisions that do not meet the criteria listed above, follow the existing processes in UO Standard S0500.

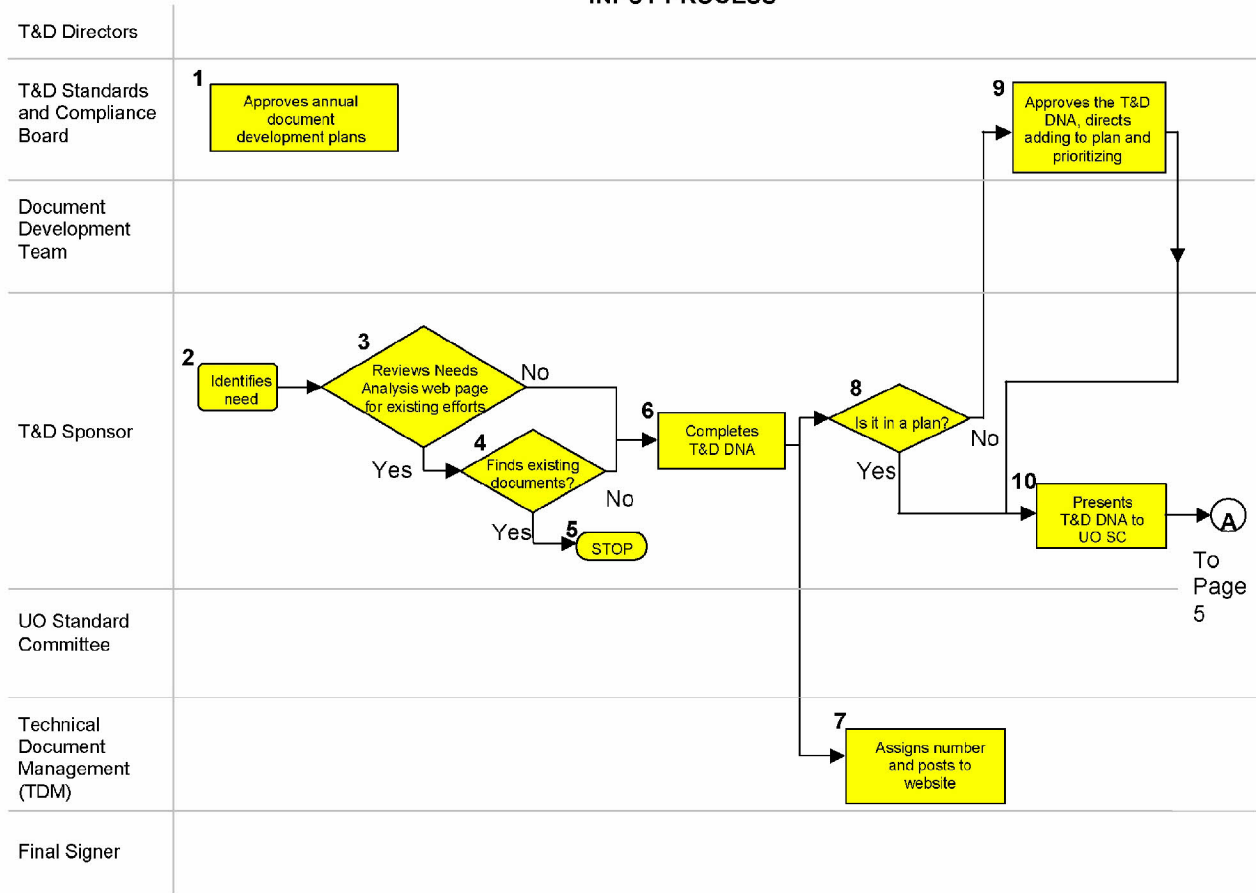
The Document Development Process

There are three stages in the document development process. They are:

1. Needs, input, and planning.
2. Development.
3. Approval, implementation, and publication.

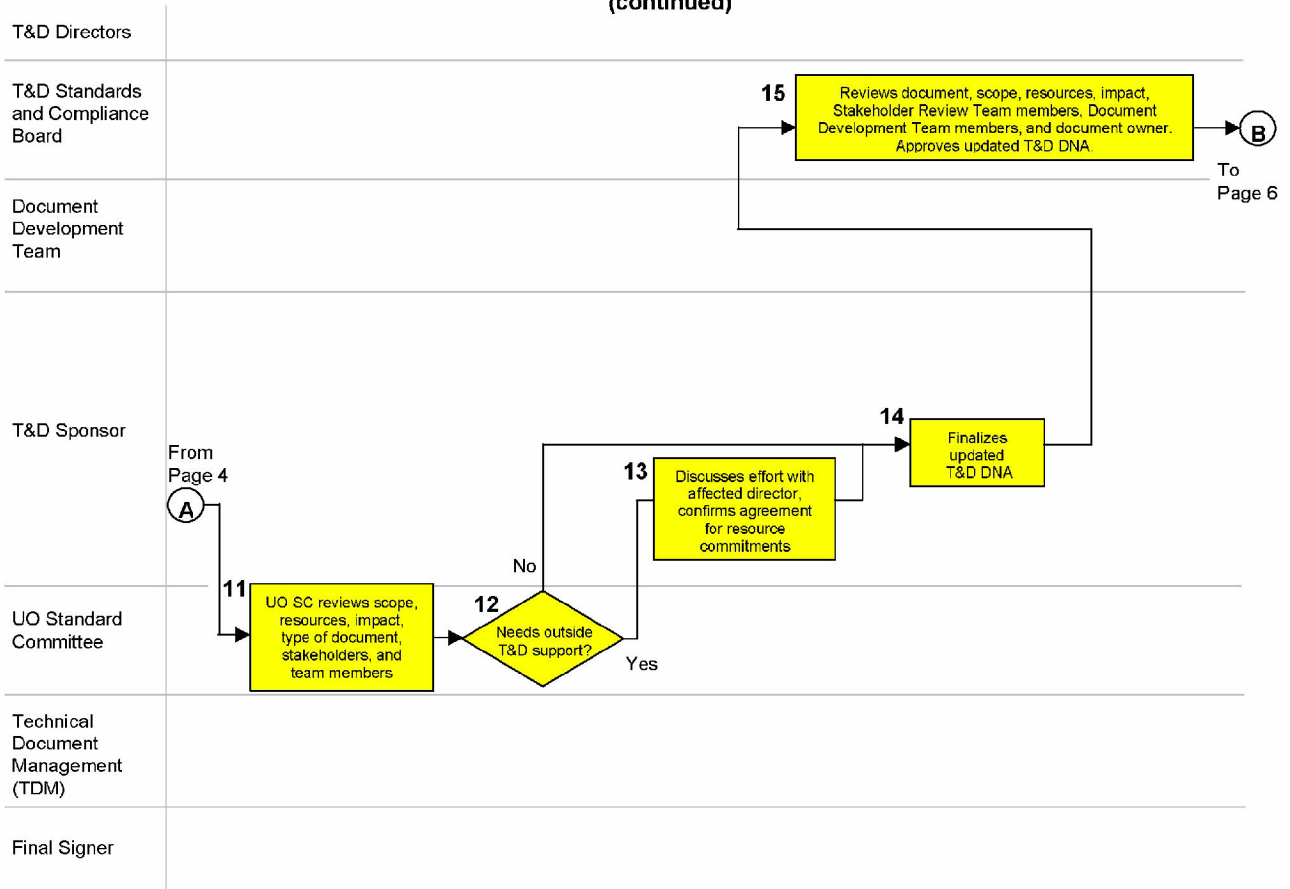
Each stage has several essential steps. There are flowcharts provided for each stage on Pages 4 through 8. Explanations for each step in the flowcharts begin on Page 9.

INPUT PROCESS

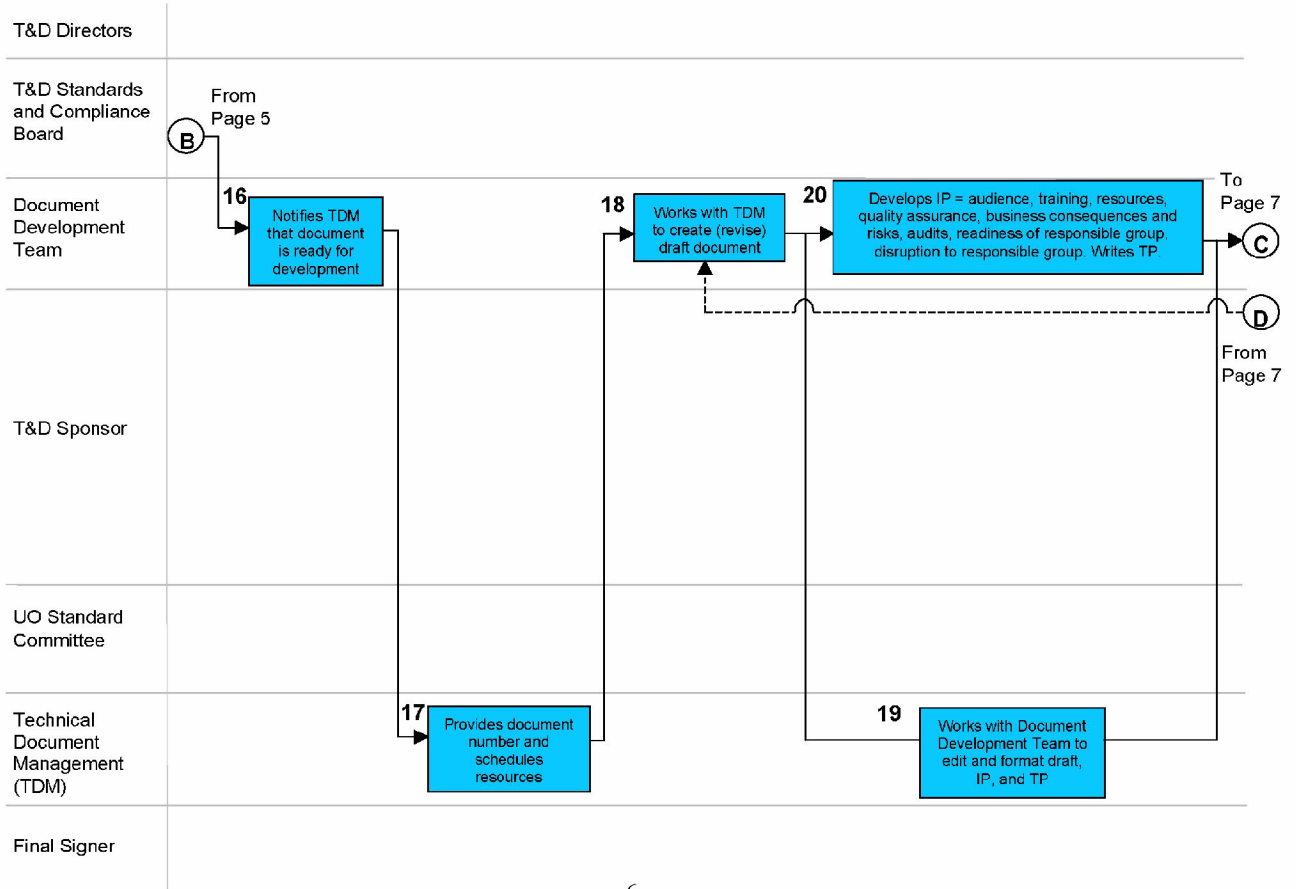


To Page 5

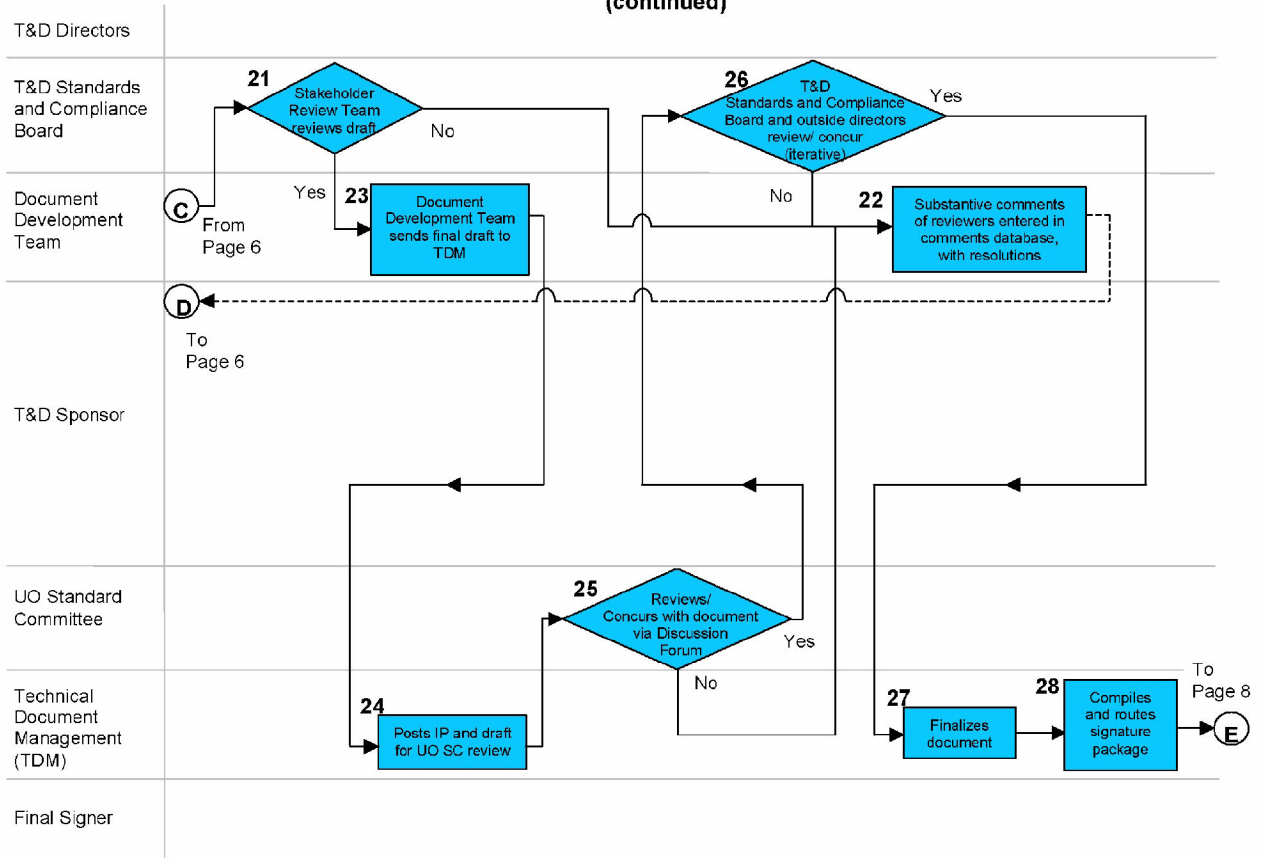
**INPUT PROCESS
(continued)**



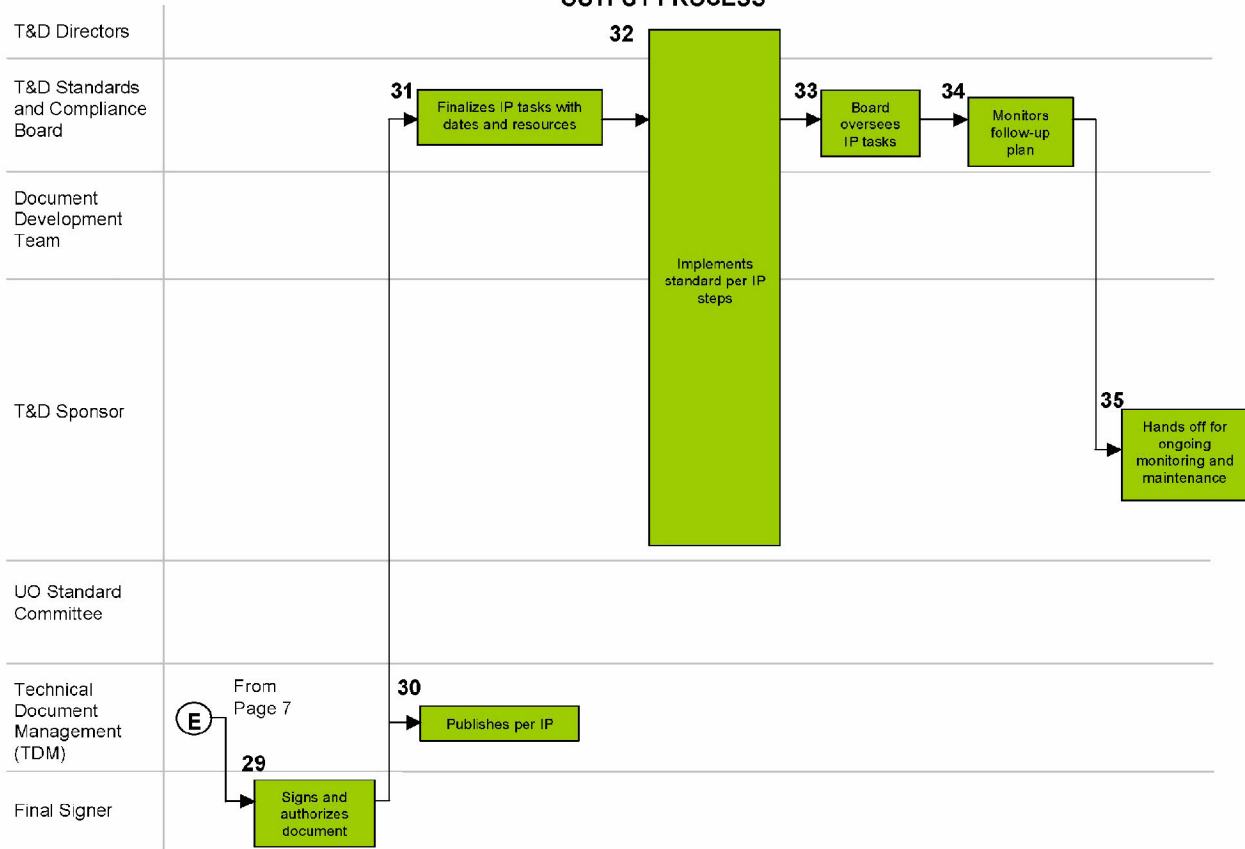
DEVELOPMENT PROCESS



**DEVELOPMENT PROCESS
(continued)**



OUTPUT PROCESS



Needs, Input, and Planning

This section of the handbook covers the following items:

- How to determine if a new document or revision is needed.
- How to propose a new or revised document.
- How to plan a new document or a revision.

The Annual Document-Development Plan

All manager-level workgroups within E&P and OM&C that have document maintenance and development responsibilities prepare a document development plan. Each November, they submit their plans to the T&D Standards and Compliance Board. The plan includes descriptions and proposed priorities for documents and revisions. The workgroups' director is responsible for the plans.

The T&D Standards and Compliance Board reviews the workgroups' plans. If necessary, the board may direct the workgroups to change priorities.

TDM posts the workgroups' document development plans. See the "2002 Document Development Plans" web page under "T&D Document Development" in the Technical Information Library (TIL) web site.

If proposals are not part of an annual document-development plan, they may be added to a plan during the year.

(See Box 1 of the flowchart on Page 4.)

Identifying Document Needs

Any employee may suggest an idea for a new or revised document. However, it will not be submitted without the support of a "T&D sponsor." A T&D sponsor must be either a manager or superintendent (PL2 management level or higher). The sponsor determines if the proposal meets the criteria listed on Page 2 of this handbook, and leads the project until it is approved for development.

Possible triggers for issuing new or revised documents may include (but are not limited to) the following:

- There is a safety concern.
- New regulations or laws have been passed.
- The Company is not in compliance with an existing law or regulation.
- New technology is introduced.
- Existing policies, practices, or procedures are not adequate.
- Failure to revise an existing policy, practice, or procedure will result in substantial costs.
- There are organizational changes within the Company.

(See Box 2 of the flowchart on Page 4.)

Checking the Needs-Analysis Web Page

The T&D sponsor checks the “Document Needs Analysis” web page found under “T&D Document Development” in the TIL. This web page lists all E&P and OM&C documents currently under development. (See Box 3 of the flowchart on Page 4.)

The T&D sponsor notes if there is a document dealing with the same purpose. (See Box 4 of the flowchart on Page 4.) If so, the process ends here, because someone else is already working on the issue. (See Box 5 of the flowchart on Page 4.)

The T&D Document Needs Analysis (T&D DNA)

If there are no documents dealing with the topic, the T&D sponsor fills out the T&D Document Needs Analysis (T&D DNA) form. (See Attachment 1, “T&D Document Needs Analysis,” and the T&D DNA instructions on Page 22.) Then, the sponsor sends the form to TDM.

A T&D DNA is required for all documents included in this procedure. The T&D DNA includes the following information:

- The proposed title
- The type of document needed
- The sponsoring officer (for standards only)
- The issuing department
- The T&D sponsor
- The document owner
- The applicable member of the UO Standard Committee
- The project coordinator
- The objective
- Anticipated impacts and costs
- Proposed new processes, procedures, tools, systems, etc., and their impact in the field
- The driving need(s) for the document (safety, regulatory reasons, etc.)
- Business risks and consequences
- Duplication of other documents and, if so, alternatives to developing a document
- Names of the subject matter experts
- Members of the Stakeholder Review Team who will participate in the document development team
- Time sensitivity, authorized due date, and effective due date
- Total training costs, by categories shown
- Training requirements
- Annual or periodic training needs
- Any impacts on union agreements, and how to handle these impacts
- Deliverables
- Any non-T&D directors who will need to review the document

(See Box 6 of the flowchart on Page 4.)

Posting the T&D DNA to the Needs-Analysis Web Page

TDM assigns a number to the T&D DNA and posts it on the “Document Needs Analysis” web page under “T&D Document Development” in the TIL. (See Box 7 of the flowchart on Page 4.)

Checking the Annual Document-Development Plans

Once the T&D DNA is posted, the T&D sponsor checks to see if the project is in the appropriate workgroup’s annual, document-development plan. If it is, the sponsor schedules a time to present the T&D DNA to the next UO Standard Committee meeting. If it is not included, the sponsor sends the T&D DNA to the T&D Standards and Compliance Board to review. (See Box 8 of the flowchart on Page 4.)

Adding the Proposal to the Appropriate Document-Development Plan

The T&D Standards and Compliance Board reviews the T&D DNA. After Board approval, the appropriate workgroup adds the document to its development plan. The T&D sponsor then schedules a time to present the T&D DNA to the UO Standard Committee.

(See Box 9 of the flowchart on Page 4.)

Presenting the T&D DNA to the UO Standard Committee

The T&D sponsor (or delegate) gives a presentation about the T&D DNA to the UO Standard Committee. (See Box 10 of the flowchart on Page 4.)

UO Standard Committee Review of the T&D DNA

The UO Standard Committee reviews the T&D DNA. It verifies and/or determines the following items:

- What type of document is needed
- The scope and impact of the proposal
- The resources needed for implementation (including any non-T&D resources)
- The stakeholders
- The Document Development Team members

(See Box 11 of the flowchart on Page 5.)

Getting Outside Support

If resources from outside of T&D are required, the T&D sponsor contacts the director(s) of the organization(s) that have these resources. The sponsor requests their buy-in and assistance. (See Boxes 12 and 13 of the flowchart on Page 5.)

Finishing the T&D DNA

The T&D sponsor edits the T&D DNA to include any changes requested by the reviewers. The sponsor ensures that all the necessary information has been entered in the form. (See Attachment 1, “T&D Document Needs Analysis,” and the T&D DNA instructions on Page 22.)

When the T&D DNA is finalized, the T&D sponsor submits it to the T&D Standards and Compliance Board.

(See Box 14 of the flowchart on Page 5.)

Approving the Final T&D DNA

The T&D Standards and Compliance Board reviews the T&D DNA. The board may request changes. The board verifies and/or determines the available resources needed to develop the document, and the type of document needed.

The board also reviews and approves the following personnel:

- The Document Development Team members (which must include those nominated by the UO Standard Committee, if applicable)
- The Stakeholder Review Team members
- The process owner (typically, the manager whose functions are most applicable to the proposal)
- The project coordinator

Then, the board approves the final T&D DNA and notifies the T&D sponsor. The project is now chartered. The T&D sponsor provides a copy of the final T&D DNA to the Document Development Team.

(See Box 15 of the flowchart on Page 5.)

Development

This section of the handbook covers developing the document from board approval to final approval.

Notifying TDM

The T&D sponsor contacts TDM when the document is ready for development. The sponsor sends TDM a copy of the board-approved T&D DNA. TDM posts the updated T&D DNA on the “Document Needs Analysis” web page under “T&D Document Development” in the TIL. (See Box 16 of the flowchart on Page 6.)

TDM's Initial Duties

If the document is a policy, standard, or guideline, the TDM clearinghouse manager assigns a document number. The TDM clearinghouse manager also serves as the TDM project lead for policies, standards, and guidelines.

For manuals and other documents, the TDM Design Unit supervisor assigns and schedules TDM resources. (TDM resources include a project lead [if applicable], technical writers, and graphics and computer-support personnel.)

The TDM clearinghouse manager or project lead holds a meeting with the project coordinator to schedule the development tasks. The Document Development Team works with TDM to finalize the document. The project coordinator fills out the TIL Checklist required by TDM. (See Attachment 4, "Checklist for Technical Information Library," and the TIL Checklist instructions on Page 33.)

(See Box 17 of the flowchart on Page 6.)

Creating the Draft Document

The Document Development Team works with TDM to develop a draft document. This may take several revision cycles. The cycles are part of the schedule developed by TDM and the project coordinator. TDM technical writers edit the text to ensure it is correct, easy to read, and targeted to the audience. TDM's completed draft includes the text, graphics, and formatting.

Further revisions may be required based on the comments of additional reviewers. (These include the Stakeholder Review Team, the UO Standard Committee, the T&D Standards and Compliance Board, and affected directors.) The Document Development Team records these additional comments in the new "Document Comment Tracking and Resolution (DCT&R)" database. The DCT&R database is currently being developed and will be available beginning the second quarter of 2002.

(See Boxes 18 and 19 of the flowchart on Page 6.)

Developing the Implementation Plan (IP)

While the document is being written, the Document Development Team also writes the IP. (See Attachment 2, "Implementation Plan," and the IP instructions on Page 24.) The IP includes the following topics:

- Document title and number (if applicable)
- Document type
- Project coordinator
- Stakeholder involvement/expert review
- Change-management approach
- Roles and responsibilities for implementation
- Impact and resource assessment
- Communication plan
- Training plan (by job classification)

- Implementation schedule

The Document Development Team also prepares talking points (TP). (See Attachment 3, Talking Points Summary,” and the TP instructions on Page 32.)

TDM edits the IP and the TP.

The Document Development Team sends all the completed documents to the Stakeholder Review Team and the T&D sponsor.

(See Box 20 of the flowchart on Page 6.)

Stakeholder Review

The Stakeholder Review Team reviews the documents. If the team approves the documents without any changes, it passes them back to the Document Development Team. If the team requests changes, the project coordinator arranges for the revisions. The project coordinator ensures that all comments are entered into the DCT&R database and resolved.

To see what must be reviewed, refer to Attachment 6, “ Stakeholder Review Checklist.”

(See Box 21 of the flowchart on Page 7.)

The Comments Database

The project coordinator ensures that the Stakeholder Review Team’s comments are entered in the DCT&R database. A resolution must be recorded for **each** comment. (See Box 22 of the flowchart on Page 7.)

Finishing the Draft

The project coordinator notifies TDM to make any requested changes. TDM posts the edited IP and TP in the Discussion Forum (see Page 21) for review by the UO Standard Committee. If the document is a policy, standard, or guideline, TDM also posts the final draft document. (See Boxes 23 and 24 of the flowchart on Page 7.)

UO Standard Committee Review of the Draft, IP, and TP

The UO Standard Committee reviews the IP and TP. If applicable, the committee also reviews the posted draft document. If the committee requests changes, the project coordinator arranges for the revisions. The project coordinator ensures that any comments are entered in the DCT&R database and resolved. (See Box 25 of the flowchart on Page 7.)

T&D Standards and Compliance Board and Directors’ Review

Following approval by the UO Standard Committee, the T&D Standards and Compliance Board and any affected directors review the draft document, IP, and TP. The director(s) sign off in the applicable space on the IP form. They notify the T&D Standards and Compliance Board when they have completed their review(s). The board then notifies the project coordinator.

If there are any requested changes, the project coordinator arranges for the revisions. The project coordinator ensures that all comments are entered and resolved.

(See Box 26 of the flowchart on Page 7.)

Preparing the Final Package

TDM makes any final changes to the document, IP, and TP. TDM then prepares a signature package containing the final draft, the IP, the T&D DNA, and a cover letter. TDM sends this package to the project coordinator. The coordinator routes it to the appropriate person, as follows:

- UO standards: The appropriate vice-president of E&P or OM&C.
- Manuals and guidelines: The appropriate director within E&P and OM&C.
- Policies: The senior vice-president and chief of UO.
- Bulletins: The applicable manager or designated responsible party.
- Engineering design standards: The assigned engineer.

(See Boxes 27 and 28 of the flowchart on Page 7.)

Approval, Implementation, and Publication

This section of the handbook covers the final approval, implementation, and future monitoring of the document or revision.

Signing the Document

The new or revised document and the IP are approved when signed by the authorized person. (See the step immediately above for a list of the appropriate people.) After signing, the signer notifies the project coordinator and TDM. The project coordinator sends TDM the signature package, including the **original, signed document**. (See Box 29 of the flowchart on Page 8.)

TDM Storage and Publication Duties

TDM stores and archives the original, signed documents.

TDM publishes the documents as provided in the IP. After the documents are published, TDM removes the T&D DNA from the “Document Needs Analysis” web page under “T&D Document Development” in the TIL.

(See Box 30 of the flowchart on Page 8.)

Implementing the Document

The project coordinator notifies the T&D Standards and Compliance Board when the document has been signed. The board then reviews the IP. The board ensures the following items:

- The IP tasks are done per the IP's requirements.
- A specific schedule is set.
- The appropriate resources are allocated and needed personnel are assigned.

(See Box 31 of the flowchart on Page 8.)

Overseeing the IP

As previously stated, the T&D Standards and Compliance Board is responsible for ensuring that all the IP steps are completed properly. In addition to scheduling and resource allocation, this includes the following items:

- Ensuring that the IP's quality-assurance measurements are taken, recorded, and reviewed.
- Verifying when the IP's requirements for publishing have been met.
- Notifying TDM at least 1 week in advance of the desired publishing date.
- Turning over responsibility to the document owner when the IP is complete.

(See Boxes 32 and 33 of the flowcharts on Page 8.)

Monitoring the Published Document

The document owner is responsible for:

- Monitoring the effectiveness of the document.
- Monitoring the DCT&R database for field feedback and comments. The document owner is responsible for ensuring comments/issues are resolved.
- Initiating revisions.

(See Box 34 of the flowchart on Page 8.)

Development Process for Documents Originating Outside of E&P and OM&C

If proposed new documents or revisions originate outside of E&P and OM&C, check the following:

- Will they have an impact on E&P and OM&C?
- Do they meet the criteria shown on Page 2?

If both of these conditions are met, use the same procedure as for other documents. (See the procedures starting on Page 3.)

Roles and Responsibilities

This section lists the roles and responsibilities of committees and individuals in the document development process.

The T&D Standards and Compliance Board

See Attachment 5, “T&D Standards and Compliance Board Charter,” for the board’s roles and responsibilities.

The UO Standard Committee

The UO Standard Committee’s roles and responsibilities include the following items:

- Reviewing and approving T&D DNAs
 - Verifying or deciding the type of document needed
 - Checking that the scope and impact are described adequately
 - Verifying that the necessary resources for development are listed, including any non-T&D resources
 - Nominating members to the Stakeholder Review Team
 - Nominating members to the Document Development Team
- Reviewing and approving documents posted in the Discussion Forum
 - IPs
 - TPs
 - Policies, standards, and guidelines

The T&D members of the UO Standard Committee are responsible for identifying non-T&D documents that will have a significant impact on T&D. They must ensure that these documents also go through the T&D development process.

The Document Development Team

The roles and responsibilities of the Document Development Team include the following:

- Working with project coordinators and TDM to write the document
- Writing the IP (See Attachment 2, “Implementation Plan,” and the IP instructions on Page 24.)
- Writing the TP (See Attachment 3, “Talking Points Summary,” and the TP instructions on Page 32.)
- Sending the documents to reviewers
- Entering the comments from reviewers in the DCT&R database
- Resolving issues from comments and entering the resolutions in the DCT&R database

The Stakeholder Review Team

The roles and responsibilities of the Stakeholder Review Team include the following:

- Reviewing the draft document, IP, and TP
- Sending review comments, as applicable, to the project coordinator

See Attachment 6, “Stakeholder Review Checklist,” for a list of items the team needs to check when reviewing documents.

TDM

The roles and responsibilities of TDM include the following:

- Posting the workgroups’ document-development plans to the “2002 Document Development Plans” web page
 - Assigning numbers to T&D DNAs and posting new and finalized T&D DNAs to the “Document Needs Analysis” web page
 - Assigning numbers to policies, standards, and guidelines
 - Working with project coordinators to set document development schedules
 - Working with project coordinators and Document Development Teams to write and edit documents, including graphics and formatting
 - Editing IPs and TPs
 - Posting edited TPs, IPs, and, if applicable, draft policies, standards, and guidelines to the UO Standard Committee’s Discussion Forum
 - Preparing signature packages and sending them to project coordinators
 - Storing and archiving original, signed documents
 - Publishing documents per the requirements of their IPs
 - Removing T&D DNAs from the “Document Needs Analysis” web page after the associated documents have been published
-

The T&D Sponsor

The roles and responsibilities of the T&D sponsor include the following:

- Deciding if the proposal for a new document or revision merits submission
- Determining if the proposed document meets the criteria for submission
- Checking the “Document Needs Analysis” web page to see if anyone else is working on the same issues raised in the proposal
- Researching and preparing information for the T&D DNA
- Filling out the T&D DNA (See Attachment 1, “T&D Document Needs Analysis,” and the T&D DNA instructions on Page 22.)
- Sending the T&D DNA to TDM for posting on the “UO T&D Document Needs Analysis” web page
- Checking if the content of the T&D DNA is included in the appropriate workgroup’s document development plan

- Sending the T&D DNA to the T&D Standards and Compliance Board if it is not in the document development plan
- Presenting the T&D DNA to the UO Standard Committee for review
- Contacting outside directors for support, if necessary
- Submitting the T&D DNA to the T&D Standards and Compliance board for review
- Updating and editing the T&D DNA after the UO Standard Committee and T&D Standards and Compliance Board reviews
- Sending the finalized T&D DNA to TDM for posting on the “Document Needs Analysis” web page
- Working with the project coordinator to ensure that the development process is on track

The Project Coordinator

The roles and responsibilities of the project coordinator include the following:

- Working with TDM to set the document development schedule
- Filling out the TIL Checklist (see Attachment 4, “Checklist for Technical Information Library,” and the TIL instructions on Page 33) and sending it to TDM
- Coordinating the efforts of the Document Development Team
- Working with the Document Development Team and TDM to write the draft document, IP, and TP
- Arranging for revisions based on comments from reviewers (the Stakeholder Review Team, the UO Standard Committee, and the T&D Standards and Compliance Board)
- Ensuring that reviewers’ comments are entered in the DCT&R database
- Ensuring that all comments are resolved and the resolutions entered in the DCT&R database
- Routing the signed signature package to the appropriate signer
- Retuning the signature package with the **signed, original** documents to TDM
- Notifying the T&D Standards and Compliance Board when the document has been signed

The Document Owner

The roles and responsibilities of the document owner include the following:

- Monitoring the effectiveness of the document per the quality-assurance procedures required by the IP
- Monitoring the DCT&R database for field comments and issues
- Ensuring that resolutions to comments in the DCT&R database are recorded
- Initiating revisions as necessary

Information Resources

Technical Information Library

All resources and web pages referred to in this handbook are in the Technical Information Library (TIL) in the Company Intranet (<http://www.techlib/>). The TIL contains the most current version of every document and form. **Always** use the most current versions. Refer to the following documents or tools:

Document-Development Web Pages

Go to <http://www.techlib/>. Click on “T&D Doc Development” in the left column of the TIL home page to access the “T&D Document Development All Plans” page. There are five options, as follows:

- “2002 Document Development Plans”
- “Document Needs Analysis”
- “Responsibility Lists”
- “TDM 2002 Document Project Schedule”
- “TDM Document Development Handbook”

Related Policies, Standards, and Author Tools

Policy 4.1, “UO Standard Development”

<http://www.edm/cgi-bin/getdocEDM.asp?itemid=972410035>

Policy 4.1 provides UO document definitions. It also gives the roles and responsibilities of employees involved in developing standards.

S0500, “Processes for Authorized Documents”

<http://www.edm/cgi-bin/getdocEDM.asp?itemid=003689771>

Author Tools

http://www.techlib/htm/author_tools.htm

This page includes the following forms and job aids required by the procedures in this handbook:

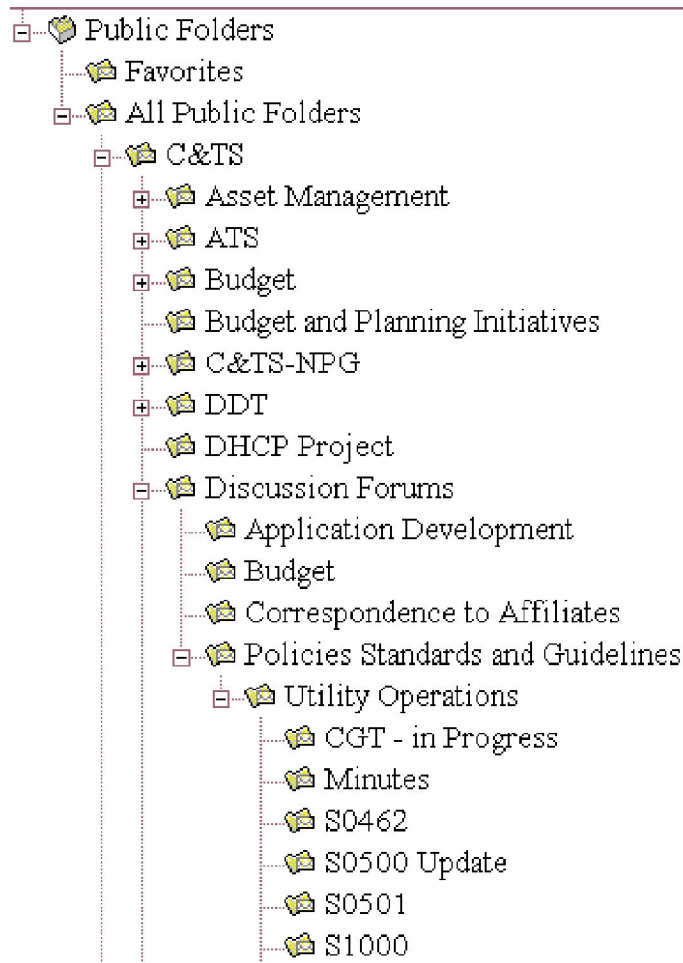
- T&D Document Needs Analysis (for T&D documents only)
- Implementation Plan
- Talking Points Summary
- Checklist for Technical Information Library
- Stakeholder Review Checklist
- Templates for standards, guidelines, and bulletins
- Process flowchart (for standards)

Also included on this page are the following tools used for documents **not** covered in this handbook:

- *UO Standard Developer's Handbook*
- Preliminary Needs Analysis
- Implementation Analysis
- *Bulletin Developer's Guide*

Discussion Forum Folders

The UO Standard Committee uses the Discussion Forum feature of the Microsoft Outlook or Exchange mail services. The Discussion Forum folders provide a central place to discuss documents. The TDM clearinghouse manager maintains the folders and grants permission to use them. Only the UO Standard Committee may use them. Access the Discussion Forum by following the path shown below.



Forms

The TIL always contains the most current versions of forms. **Always** use the most current version. This handbook includes the forms and instructions for completing them.

T&D Document Needs Analysis (T&D DNA) (for T&D Documents Only)

The T&D sponsor must prepare a T&D DNA before a new document or revision may be developed.

See Attachment 1, “T&D Document Needs Analysis.”

Use the following list of comments and questions as a guide to filling out the T&D DNA form:

General Information

- **Title of Proposed UO Document.** Enter the full title.
- **Type of Document.** Enter the type of document, such as standard, manual, policy, etc.
- **Sponsoring Officer (standards only).** If the proposed new or revised document is a standard, enter the name and title of the sponsoring officer.
- **Issuing Department.** Enter the full name of the issuing department.
- **T&D Sponsor (Manager/Superintendent).** Enter the full name and title of the T&D sponsor.
- **Document Owner.** Enter the full name and title of the document owner. (The document owner will monitor the document’s results after it is implemented.)
- **UO Standard Committee Member.** Enter the name and title of the member of the UO Standard Committee who represents the issuing department.
- **Project Coordinator.** Enter the name and title of the project coordinator.

1. Objectives

What will be accomplished by implementing the document? List all of the expected results. What are the mandatory requirements?

2. Impacts and Costs

Describe how this document will impact the resources and cost structure of the affected organizations. Describe how it will affect standard rates, productivity, and workload. Will the requirements cost the Company more than \$500,000 annually, over and above the present process costs?

3. New Processes, Procedures, or Technology

Describe any new processes, procedures, tools, systems, etc., that will change field practices of the impacted organizations. Explain what will be changed.

4. Background

Why is the document necessary? What is the driving concern(s)? Describe any safety issues or incidents. Describe any new regulatory requirements or legal issues. Describe any financial or other business reasons.

5. Business Risks and Consequences

What are the business risks or consequences if this document is not implemented? Describe any safety violations or risks. Describe any penalties, fines, or liabilities resulting from non-compliance with laws or regulations, or failure to document consistent work practices. Describe any negative financial consequences.

6. Duplication of Documents

How does the document affect other documents? List any documents that will be duplicated or impacted. If there are duplications, what alternatives are there to developing this document?

7. Subject Matter Experts

Who will serve as subject matter experts to help develop the document? List all of their names and titles.

8. The Stakeholder Review Team

Who will serve on the Stakeholder Review Team? List all of their names and titles.

9. Due Dates

In what ways is this document time-sensitive? What is the authorized (approval) date? What is the effective implementation date? Is the time between the authorized and effective dates sufficient to perform all the implementation tasks?

10. Total Training Costs

Does the total training cost exceed \$200,000? Will the initial training require more than 1 hour per employee? How many hours per employee will be needed? Itemize the costs, as follows:

- Curriculum development
- The number and types of employees being trained
- Delivery costs: travel, lodging, facilities, tools, training materials, trainers' expenses
- Total, non-productive cost of the training to the impacted organizations

11. Annual or Periodic Training

Will this document require annual or periodic training or recertification? Describe the training requirements.

12. Labor Issues

What are the impacts on union agreements? How will these impacts be handled?

13. Deliverables

What exactly will be produced? List the document itself, appendixes, the Implementation Plan (IP), training materials, compliance measures, etc.

14. Non-T&D Directors

Which non-T&D directors need to review the document? List their names and titles.

Implementation Plan (IP)

The Document Development Team completes the IP form. Each section of the form must be filled out. The IP must accompany the document throughout the development and implementation processes. This ensures that implementation issues are consistently reviewed at each step.

Implementation planning consists of two phases:

- The Implementation Analysis
- The Implementation Action Plan

The implementation analysis phase should be started at the beginning of the document development process. This helps ensure that the necessary resources are identified in advance. It also helps identify any implementation issues so they may be handled efficiently. After the draft document is developed, the implementation analysis should be reviewed and revised, as necessary, to reflect the document's requirements. The information developed in the analysis phase is then used to establish the specific actions, responsibilities, and schedules provided in the action plan.

The implementation action plan phase is used to organize and record:

- The specific actions that need to be performed
- The individuals responsible for performing each action
- The date each action is scheduled to be completed

See Attachment 2, "Implementation Plan."

Use the following questions and comments as a guide to filling out the IP:

Implementation Analysis Part of the IP Form

1. Stakeholder Involvement/Expert Review

Stakeholder involvement and expert review ensure that the document will be developed with help from the most qualified persons: technical experts and those directly affected by the document.

List the subject matter experts who will be consulted. Include experts both inside and outside of the Company.

Fill in the "Review Dates" column when the experts and stakeholders have completed their review and input.

Questions

- List any safety concerns. Will the document need review by the Safety, Health, and Claims department?
- List any legal requirements. Will the document need review by the Law department?
- List any issues related to rates. Will the document need review by the Rates, Accounting, or Tariff departments?
- List any labor-agreement issues. Will the document need review by the IBEW, the ESC, or the Industrial Relations department?
- Technical review: Who are the technical experts? Who are the users? Who is responsible for the implementation? Have they reviewed the document?
- Stakeholder review: Who are the members of the Stakeholder Review Team?

2. Change-Management Approach

Describe the Document Development Team's philosophy toward helping the affected E&P and OM&C groups incorporate the changes into their day-to-day business practices. Answer the following questions on a scale of 1 to 5:

How much of an impact will this standard or change have on the organization?

Minor		Moderate		Major
1	2	3	4	5

How resistant is the organization likely to be towards this change?

Minor		Moderate		Major
1	2	3	4	5

Using the answers to the previous two questions, check the appropriate box in the matrix below:

Resistance/Impact Matrix

R E S I S T A N C E	5					
	4					
	3					
	2					
	1					
		1	2	3	4	5
IMPACT						

The score on the matrix indicates the amount of work required to effectively implement the document. A score of 1/1 indicates a minimum level of effort. Conversely, a score of 5/5 indicates significant effort will be necessary. Appropriate action, such as additional training or detailed communication, must be taken when there is high impact and/or high resistance. Consider the degrees of impact and resistance when answering other IP questions.

3. Roles and Responsibilities for Implementation

Define individual and group roles and responsibilities for implementing the document. List the specific expectations for each department, group, and individual listed in the process. (For further guidance, see the “Roles and Responsibilities” section of this handbook, starting on Page 17.)

Questions

- Who is responsible for each of the deliverables listed in this IP?
- Who is responsible for providing training?
- Who is responsible for monitoring the effectiveness of the document?

4. Impact and Resource Assessment

Evaluate how the document or revision will impact employees and organizations. Describe the resources available to develop and implement the proposal. Determine if the resources are adequate.

Questions

- What specific processes or practices are being changed?
- Which organizations are impacted by the document's requirements?
- What is the impact on employees? What employee classifications will perform the new or revised actions required by the document? Describe the actions.
- What new materials or tools are required? Are they available? Are they in the budget?
- Are new computer or data-management systems required? Describe them. Are they available? Are they in the budget? Has the Information Technology Advisory Committee (ITAC) approved them? If so, give the date.
- Describe how this document will impact the resources and cost structure of the affected organizations. Describe how it will affect standard rates, productivity, and workload. Will the requirements cost the Company more than \$500,000 annually, over and above the present process costs?
- Are the resources and expenses required by this document incorporated into annual financial and resource plans?
- Describe any possible union issues that will need to be resolved. Are union positions affected? Is the union(s) aware of the document's requirements?

5. Communication Plan

Explain how the document will be communicated to all the affected employees. Include the reason for the new document or revision.

Questions

- Why is the document necessary? What is the driving concern(s)? Describe any safety issues or incidents. Describe any new regulatory requirements or legal issues. Describe any financial or other business reasons.
- What organizations and job classifications need to know about the document?
- How will this document or revision be communicated to each group of affected employees? (Holding tailboard meetings for electric crews is one example.)
- Who is responsible for communicating the changes to the affected employees?
- What problems, if any, might occur if non-targeted employees read this document or revision? Will it create confusion?
- What will be included in the communication package? The plan must include the reasons why the changes are necessary.
- What are the main talking points needed for general implementation of the document?

6. Distribution Plan

Explain how the document will be delivered to the affected organizations and to any other interested parties.

Questions

- In what ways is the document time-sensitive?
- Who must get a copy of the document? When must they get it? Is anyone outside of the OM&C and E&P?
- How will the document be delivered? Is there a mailing or email list?
- Will a special, targeted distribution be necessary, or may the document be issued by a TDM update?

7. Training Plan (by Job Classification)

Identify the necessary training. Make sure that adequate resources and time are allocated for both development and training, especially if there is a new training program.

Use the “Information Change Matrix” on Page 29 to help determine the appropriate levels of training.

Questions

- What training is needed? Who will develop it? Who will provide it?
- What kinds of training materials are needed? Describe them.
- How much time is required for training development and delivery?
- What is the amount of training time required per each employee, and for the affected groups?
- Can the training for this document be added to existing training programs? If so, how?
- How will each component of the training be funded?
- How is the training being budgeted and scheduled?
- What are the codes for the Training Server? Are they presently available?
- In what ways is the document time-sensitive? How does this affect the training?
- Will this document require annual or periodic training or recertification? Describe the training requirements.

Information Change-Management Matrix

	Risk to Company and or Required Behavioral Change (Consequences of Failure)		
	Minor	Moderate	Major
Intervention to Support Change	Talking Points	Talking Points Informational Presentations Targeted Training	Talking Points Informational Presentations Targeted Training Qualification Testing Periodic Requalification, Testing, or Training
Implementation Time	Short	Short to Medium	Long
Action Groups	Developer	Developer Learning Services: Analysis and Development User Delivery (and Test)	Developer Learning Services: Analysis, Development, Delivery, and Test
Documentation	None	Depends on Scope or Consequences (i.e. None or Training Server)	Training Server
Funding Source for Intervention	None	Department Generating the Requirement	Company
Cost	Minimal	Minimal to Moderate	Moderate to Significant
Audit	Informal Follow-Up	50% Random Formal Audit	100% Formal Audit
Consequences	Verbal	Verbal/Written Reminder	Direct PMP or PD Consequence

8. Follow-Up Plan (Measurement of Implementation Effectiveness)

Describe the follow-up plan, which is designed to ensure that the objectives of the document will continue to be met. The follow-up plan starts at least 6 months after the document has been approved and implemented.

Questions

- What are the expected results of the document? How can they be measured?
- What measures or controls are needed to monitor compliance? Are they developed?
- Who is responsible for monitoring and measuring? How often are monitoring and measuring done?
- How will the implementation be verified?
- Who is the document owner?
- Describe the feedback loop for this document.
- Is the document's long-term review schedule adequate? Describe why.

9. Implementation Schedule

The implementation schedule starts when the document is signed. List the schedule for implementing the document. Give the due dates for approval and for implementation. List any dates that **must** be met.

Questions

- Describe how the schedule meets mandated compliance deadlines.
- What is the approval date?
- What is the effective implementation date? Is the document considered effective only after all employees are trained?
- Is the time between the authorized and effective dates sufficient to perform all the implementation tasks?
- Is the training schedule in place? Have all the training resources been developed? List the training schedule. Who is responsible for the training?
- Describe the schedule for the communication and distribution plans. List any exact dates. Who is responsible for these plans?

Implementation Action Plan Part of the IP Form

Fill out the Implementation Action Plan part of the form after analyzing what is necessary to successfully implement the document's requirements. Each step includes the necessary actions, the persons responsible for performing them, and the dates by which the actions must be performed.

1. Pre-Implementation Action Plan

“Pre-implementation” includes any actions that must be taken before the document may be introduced to the field for training and other implementation steps. For example, if a new piece of equipment is being introduced, it must be evaluated, approved, ordered, assigned a material code, and be in stock.

Questions

- What specific actions need to be taken before entering the implementation phase?
- Who is responsible for each specific action? Give exact names and titles.
- When must each specific action be completed? Give exact dates.

2. Communication, Distribution, and Training Action Plan

“Communication” includes all actions that must be performed to effectively communicate the document’s requirements to all impacted employees.

“Distribution” includes all actions that must be performed to fully distribute the document to all employees who need it.

“Training” includes all actions that must be performed to thoroughly train all employees impacted by the document.

Questions

- What specific actions need to be taken to communicate the document’s requirements?
- What specific actions need to be taken to fully distribute the document?
- What specific actions need to be taken to thoroughly train all impacted employees?
- Who is responsible for each specific action? Give exact names and titles.
- When must each specific action be completed? Give exact dates.

3. Follow-Up Action Plan

“Follow-up” includes all actions that must be performed to evaluate the effectiveness of the document and the IP.

Questions

- What specific actions need to be taken to evaluate the effectiveness of the document and the IP?
- Who is responsible for each specific action? Give exact names and titles.
- When must each specific action be completed? Give exact dates.

Talking Points Summary

The Talking Points Summary provides a short overview of the specific changes required by the document or revision. The Document Development Team is responsible for preparing the Talking Points Summary.

The Talking Points Summary accompanies the document or revision and the IP during all reviews. It is issued along with the document during the implementation process.

See Attachment 3, "Talking Points Summary."

Use the following questions and comments as a guide to filling out the Talking Points Summary. Refer to the T&D DNA and the IP for the information.

Target Audience

Which employees will be affected by this document? List the work groups and job classifications.

Mandatory Requirements

What are the mandatory requirements? List any specific, new work processes or procedures that are required by the document.

New or Revised Document

Is this a new or revised document? If it is revised, what changes are being made? List all the changes.

Implementation Date

When will this document be implemented? Give the exact, scheduled date. Is the document considered implemented only after all employees have been trained?

Objective

What will the document or revision accomplish? List each of the intended results.

Methods of Implementation

How will the document be implemented? Briefly describe the communication, distribution, training, and follow-up methods.

Checklist for Technical Information Library

The TDM web team uses the information on this required checklist when placing documents online. The project coordinator is responsible for filling out and sending this form.

See Attachment 4, "Checklist for Technical Information Library."

Contact Information

For the purposes of this form, the "contact" is the project coordinator. Enter the project coordinator's name, corporate ID, department, and PCC number.

Document Information

Fill in this information as applicable. List any documents that are being canceled as a result of the new or revised document. In the case of updates, this includes the previous document.

Web Pages

Documents are listed on the issuing department's functional web page. Identify other groups that will be using the document and TDM will add it to their web pages. To view the documents, click on the department name listed in the left column of the TIL home page.

For TDM Use Only

Project coordinators may ignore these boxes.

Owner Information

For E&P documents, provide the name, corporate ID, and department of the document owner.

Attachments

- 1. T&D Document Needs Analysis*
- 2. Implementation Plan (for T&D Documents Only)*
- 3. Talking Points Summary*
- 4. Checklist for Technical Information Library*
- 5. T&D Standards and Compliance Board Charter*
- 6. Stakeholder Review Checklist*