

***OPERATING PROCEDURE***

***MANUAL***

**Operating Procedures**

**Maintenance & Development**

**Version 2.0 Rev 15**

**March 9, 2018**

Document Control

Preparation

| **Prepared by** | **Role** | **Date Completed** |
| --- | --- | --- |
| J. Bowles | Revision Writer | May 7, 2004 |
| D. Leese | Revision Writer | August 4, 2004 |
| Bowles/Leese | Revision Writers | August 4, 2005 |
| Bowles/Leese | Revision Writers | September 19, 2005 |
| Bowles/Lee | Revision Writer | April 20, 2007 |
| Bowles | Revision Writer | February 25, 2008 |
| Frosch/Hartmann | Revision Writer | October 9, 2009 |
| Frosch/Bowles | Revision Writer | October 25, 2010 |
| Frosch/Hartmann/Martinez/Solis | Revision Writer and editors | October 30, 2013  |
| Frosch/Hartmann/Martinez/Blackmer | Revision Writer and editors | July 13, 2015 |
| Hartmann/Gaddy/Vrana | Revision Writer and editors | April 27, 2017 |
| Hartmann/Gaddy/Vrana | Revision Writer and editors | March 9, 2018 |

Manual Change History

| **Version** | **Reason for Issue** | **Effective Date** |
| --- | --- | --- |
| 1.0 (Draft 1) | Draft for review | May 2, 2001 |
| 1.0 Rev 0 | Final Procedure Review |  |
| 2.0 Rev 0 | Final Procedure Review | October 17, 2002 |
| 2.0 Rev 1 | Changes in System Op. org. structure | July 16, 2003 |
| 2.0 Rev 2 | Update definitions; added section 9.8.2; update title on change cover sheet | October 1, 2003 |
| 2.0 Rev 3 | Section six through nine added Training Coordinator as reviewer on all changes regarding updates, revisions and/or new procedures; updated Attachment one and two to include Training Coordinator on reviewer list  | May 11, 2004 |
| 2.0 Rev 4 | Updated section eight on Procedure Updates | August 6, 2004 |
| 2.0 Rev 5 | Changed ‘and’ to ‘or’ in the following locations:Sections 7.7, 8.2.4, and 9.7, Attachment 1 ‘Approved’ section  | August 10, 2005 |
| 2.0 Rev 6 | Updated sections 3, 5 – 8, Attachment 1 | August 29, 2005 |
| 2.0 Rev 7 | Added OTS/Training Supervisor to sections 5, 6, 7, 8 and 9; added OTS/Training Supervisor to Change Cover Sheet | September 27, 2005 |
| 2.0 Rev 7 | Editorial Change – updated Attachment 1 | December 6, 2006 |
| 2.0 Rev 8 | Changes several sections to accommodate organizational changes and make other improvementsRemoved Approval and Distribution List tables from Document Control sectionSection 9 – added Pen & Ink change processModified Change Cover Sheet, Change LogAdded Addendum 4 Create Power Operations Bulletin | May 24, 2007 |
| 2.0, Rev 9 | 1.4 Added requirement for 3-year review cycle for system operations proceduresDeleted references to Training Coordinator | February 28, 2008 |
| 2.0 Rev 10 | Updated section 1.4, 1st 5 bullets in section 4, 9th bullet in section 5, all steps in section 6.1, steps 1 – 3 in section 6.2, steps 1 & 2 in section 6.2.2, step 1 in section 6.2.3, steps 1 – 5 in section 6.3, Discussion and step 2 in section 6.4, and step 4 in Addendum 4 | October 14, 2009 |
| 2.0 Rev 11 | Updated sections 3, 4, 6, 9 and 10 to incorporate the changes of implementing the ERCOT Enterprise Document Vault. | November 1, 2010 |
| 2.0 Rev 12 | Updated sections 1.3, 1.4, 2, 3, 4, 5, 6, 9 Addendum 2 and 4 to incorporate clarifying language. Reviewed entire document. | November 1, 2013 |
| 2.0 Rev 13 | Updated sections 1.3, 1.4, 3, 5, 6, Addendum 3 to incorporate clarifying language. Reviewed entire document.  | July 15, 2015 |
| 2.0 Rev 14 | Updated sections 4, 5, 6, Addendum 2 & 3 to incorporate clarifying language. Reviewed entire document. | May 1, 2017 |
| 2.0 Rev 15 | Updated sections 3, 4 & 9 attachment 1. Reviewed entire document. | March 9, 2018 |

**Contents**

[Document Control ii](#_Toc276378195)

[1. Introduction 5](#_Toc276378196)

[1.1 Purpose 5](#_Toc276378197)

[1.2 Scope 5](#_Toc276378198)

[1.3 Procedural Adherence 5](#_Toc276378199)

[1.4 Periodic Reviews 5](#_Toc276378200)

[2. Definitions and Acronyms 6](#_Toc276378201)

[3. Roles/Responsibilities 8](#_Toc276378202)

[4. Control and Distribution 9](#_Toc276378203)

[5. General Guidelines for New Procedures or Revising Procedures 10](#_Toc276378204)

[6. Procedures 11](#_Toc276378205)

[6.1 Creating a New Procedure or Updating an existing Procedure 11](#_Toc276378206)

[6.2 Temporary Change (TC), Editorial Change (EC) 12](#_Toc276378207)

[6.2.1 Temporary Change (TC) 12](#_Toc276378209)

[6.2.2 Editorial Change (EC) 12](#_Toc276378210)

[6.3 Pen and Ink Changes 14](#_Toc276378211)

[7. Version/Revision Numbers 15](#_Toc276378212)

[8. Procedure Style Guidelines 16](#_Toc276378213)

[**9. Attachments 18**](#_Toc276378214)

[Attachment 1 Change Log (Typical) 18](#_Toc276378215)

[Attachment2 Power Operations Bulletin example 20](#_Toc276378216)

[10. Addenda 22](#_Toc276378217)

[Addendum 1 Task Analysis 22](#_Toc276378218)

[Addendum 2 Posting Process (Procedures) 23](#_Toc276378219)

[Addendum 3 Posting Process (Power Operations Bulletins) 24](#_Toc276378220)

[Addendum 4 Create Power Operations Bulletins 25](#_Toc276378221)

# 1. Introduction

## 1.1 Purpose

This procedure establishes the process for initial development, review, approval, control, distribution, archiving, temporary change, and revision of operating procedures used within ERCOT System Operations. This document also contains steps to assist the procedure developer in determining content and task details.

## 1.2 Scope

Operating Procedures used within the ERCOT control room environment that govern task performance as directed by state statute, commitments to legal authorities, outside agencies, regulatory bodies, or vendor contracts shall be administered in accordance with this procedure.

An instruction written to guide consistent performance of a task that is not governed by a commitment to an outside entity should be written as a guideline, and is outside of the scope of this procedure.

## Procedural Adherence

While the concept of Procedural Adherence allows for deviation from a procedure due to special circumstances, such a deviation is intended to be as needed and should be with the concurrence of either the Shift Supervisor or the Manager, time permitting. These “one-time deviations” are documented in the operator’s logs and should not be processed as a Procedure Update, Temporary Change, or Procedure Revision, but should be evaluated for the need to do so. Regardless, the System Operator has the clear decision making authority to take whatever actions are necessary to preserve the integrity and reliability of the ERCOT system.

In special circumstances, a memorandum can be used as a substitute for either a Procedure Update or a Temporary Change to an Approved Procedure. A Pen & Ink change (as described in Section 6.3) may also be utilized until a permanent change can be made.

## Periodic Reviews

System Operations Procedures shall be reviewed Annually to ensure continued compliance with NERC Reliability Standards, ERCOT Protocols and Operating Guides, and system updates.

# 2. Definitions and Acronyms

* Addendum: A component of a procedure that is a document that provides clarification or explanation of some aspect of the procedure. Addenda do not contain requirements.
* Annual: An event is conducted at least once within a calendar year, with the calendar year beginning on January 1 and ending on December 31 (calendar year). There should be no more than 15 months between the events.
* Appendix: A component of a procedure that lists additional sources of information or data, which are not “references” as defined in this procedure.
* Attachment: A component of a procedure that is usually a form to be completed
* Controlled Procedure: A procedure whose content is maintained by administrative process to ensure consistency between manuals.
* Guideline: Written instruction that provides an acceptable process for completion of a task, but does not restrict other alternatives for task performance.
* Job Analysis: A complete listing of all the tasks that is specific to a particular job title.
* Manual: A collection of procedures related to a specific job title or function.
* May: Denotes permission. Compliance is optional and is neither recommended nor required.
* Operating Procedure: A series of detailed steps (instructions) describing the execution of a specific task assigned to an operating position.
* Policy: Written statement formally approved by the ERCOT Board or Chief Executive Officer, defining corporate goals, expectations, and/or objectives in specific areas.
* Preparer: The person who has assumed the responsibilities described as such in this procedure. Operators shall not be preparers.
* Procedure: Written instructions to ensure consistent performance of a task. Procedures are typically written in order to meet external or internal commitments, obligations, and/or adherence to Board Policy.
* References: Documents to which the procedure refers directly, or that were used as source material for specific content of the procedure. Examples are: ERCOT Protocols, System Design Documents, etc.
* Reviewer: Person with adequate technical and/or operations knowledge to be able to discern errors and recommend corrections to the procedure being reviewed.
* Shall: Denotes a requirement. Compliance with this step is mandatory.
* Should: Denotes a recommendation. Compliance with this step is expected unless circumstances prevent compliance.
* Subject Matter Expert (SME): A person with specific knowledge of how, why, and/or when a task or step is performed, OR, a person who is technically or business process qualified and has a good understanding or extensive experience of the subject matter.
* Task Analysis: A thorough listing of every step required to complete a particular task. A task analysis includes a description of the conditions under which the task is to be performed, the standards which must be met for successful task completion and documentation of all tools, equipment, software applications and references required to perform the task.
* Typical: As applied to forms that are included in procedures, this means that the information that is to be collected on the form is required, but the format may be modified if necessary. Otherwise forms are used as shown in the procedure.

# 3. Roles/Responsibilities

* CEO Direct Reports/Directors: Ensure that those commitments made under their area of responsibility that fall within the scope of this procedure are directed by written instructions/procedures.
* ERCOT, Inc. Employees and Contractors: Ensure compliance with commitments by adhering to procedures and instructions and submit changes to documents and/or instructions to ensure the task(s) to be performed can be accomplished in accordance with written requirements.
* Manager: The references to Manager in this document refer to the Senior Manager, System Operations. The Manager ensures that personnel responsible for implementing ERCOT procedures or written instructions, governed by this procedure, are aware of the requirements and adhere to such instructions. Sponsor the development of procedures, and/or guidelines to ensure proper task performance.
* Preparer: Develops the procedure based upon SME recommendations.
* Ensures that the procedure feedback is incorporated as appropriate. Routes the procedure for approval and documentation.
* Maintains communication with Manager or SME for technical clarification.
* Ensures that the procedure format complies with this Manual and other required documents.
* Ensure that all other organizations or departments that may be impacted by a procedure have input and/or concurrence rights over the content of the procedure.
* Determines the reviewers for a procedure.
* Ensures references are listed, e.g., the source of commitments, or links to other procedures.
* Reviewer: For the area of the procedure for which he is a SME;
* Ensures that the procedure reflects the needs of the user and is functional, accurate, and understandable.
* Ensures that the level of detail is adequate and the work process is clearly defined.
* Senior Manager, System Operations: Responsible for approving a procedure for use.
* Should ensure that all aspects of a commitment under his area of responsibility addressed by a procedure.
* Resolves comments or conflicts from differing parties during procedure development and/or review process that the Preparer is unable to resolve.
* Ensures steps written to meet a commitment are not deleted.
* Subject Matter Expert: Provides the required technical information and support.

# 4. Control and Distribution

* The System Operations Procedures are located in the SOCR Enterprise Document Vault. The ‘working library’ is where the procedures are kept for drafting, reviewing and approving. Once approved, the final is kept in the “Policies and Procedures” section in the Enterprise Vault. The archived procedures will be stored in electronic folders that are maintained with restricted access on System Operations P:\\_Operations\Procedures.
* A “Postings-no track changes” is uploaded onto the ERCOT SharePoint website in the Enterprise Document Vault, Policies and Procedures in Corporate Policy: 8-System Operations which contains the Approved procedures with all changes accepted. .
* An “Archive” folder which contains retired versions of a procedure.
* An “Operations Bulletins” folder which contains the previous Operations Bulletins.
* Copies of controlled procedures will be maintained in the control rooms and other locations as determined by either Manager,
* An approved new or revised procedure should be entered into controlled procedures manuals on or before the Effective Date.
* Procedures may be printed locally from an electronic copy that has been distributed, or printed remotely, distributed, and inserted into controlled manuals.

# 5. General Guidelines for New Procedures or Revising Procedures

* Gather related references, procedures, and any other pertinent documentation such as a task analysis (see Addendum 1).
* Determine the purpose and scope of the procedure.
* Determine the qualification(s) required for performance of the procedure.
* Determine if any software applications, online help files, or other documents will be affected by the new or revised procedure.
* Contact the Help Desk for assistance with software or help file change requests.
* Contact the appropriate Manager about any affected documents or procedures to coordinate necessary activities related to this change.
* Operations Training personnel will perform training needs analysis and coordinate with operations personnel to ensure that the necessary training and communications are completed prior to the effective date of the procedure.
* Approval of Power Operations Bulletins by Manager is to ensure market sensitive information is not posted for public viewing.
* Procedure content that contains market sensitive information should be maintained as an ongoing temporary change, Desktop Guide or redacted from the published versions of the procedure and power operations bulletins.

# 6. Procedures

| 6.1 Creating a New Procedure or Updating an existing Procedure |
| --- |
| Step # | Procedural Steps |
| **1** | The Preparer will:* Draft the new procedure or update an existing procedure,
* Initiate the approval process in the Document Vault or notify Manager that procedure is ready for approval process
 |
| **2** | The Administrative Assistant will (once notified of approved procedure):* Print procedure with track changes for operator sign off sheet
* Accept track changes and file in “Approved” folder
* Post on the ERCOT website
* Prepare Power Operations Bulletin and E-mail to OWG, ROS, WMS and System Operators (Procedure and Ops Bulletin mail list)
* File in “Operations Bulletins” folder
* Update procedure manuals at primary control room, alternate control room, OTS room and other locations as determined by either Manager
 |

##

| 6.2 Temporary Change (TC), Editorial Change (EC) |
| --- |
| Step # | Procedural Steps |
| **Discussion** | * A Temporary Change modifies a procedure to accommodate emergent changes in systems, policies, or other procedures that will affect the immediate and future performance of a task within the subject procedure for a specified period of time. The Temporary Change is confidential and must not be posted on the ERCOT website. It must also be removed from the procedure on or before its expiration date.
* An Editorial Change requires no modification to version or revision numbers, or effective dates
 |
|  | Temporary Change (TC) |
| **NOTE** | Extensions and revisions of Temporary Changes shall be processed in the same way as the original and may use an alphabetical extension to the Change Number. (e.g., 321 to 321a) |
| 1 | The Preparer or Administrative Assistant will:* Obtain the next sequential Change number from log book
* Obtain separate Change numbers for each procedure that is affected.
* (e.g. if a change will be made that affects both the Real-Time Desk procedure and the Transmission and Security Desk procedure, two (2) change numbers are required; one for each procedure.)
* Draft the Temporary Change including the change number, the effective date, expiration date or conditions for removal
* Initiate the approval process in the Document Vault or notify Manager that procedure is ready for approval process
 |
| 2 | * The Administrative Assistant will, upon notification from Manager:
* Print procedure with track changes for operator sign off sheet
* File in “TCs” folder
* Update procedure manuals at primary control room, alternate control room, OTS room and other locations as determined by either Manager
 |
|  | Editorial Change (EC) |
| **NOTE** | Approval by Manager is not required for Editorial Changes |
| 1 | * The Administrative Assistant will obtain the next sequential Change number from the Change log (Attachment 1), located with the Administrative Assistant.
* Obtain separate Change numbers for each procedure that is affected. (e.g. A change will be made that affects both the Real-Time Desk procedure and the Transmission and Security Desk procedure. Two (2) change numbers are required; one for each procedure.)
* Update the Change History section of the procedure
* Update the Change Log
* Replace the affected sections of the procedure in the Operating Procedure Manuals at all appropriate Operating Desks.
* Update the System Operations Training Group controlled copy of the procedure manual.
 |
| 2 | Move the replaced procedure file to the “Archive” folder. |

| 6.3 Pen and Ink Changes |
| --- |
| Step # | Procedural Steps |
| **Discussion** | The Shift Supervisor may author a change to a procedure with the approval of Manager. |
| 1 | * Make a handwritten pen & ink change directly on the appropriate copies of the affected procedures or the procedure may also be modified electronically.
* In either case, the changes, the date and time of the changes and the Shift Supervisor’s initials shall be clearly indicated on the changed documents.
* Document the approval of Manager in the Shift Supervisor’s log.
 |
| 2 | * The Manager will process the pen & ink change in a reasonable time.
 |

#

| 7. Version/Revision Numbers |
| --- |
| Step # | Procedural Steps |
| NEW | If the Operating Procedure is new, then assign a version number of 1.0 and a revision number of 0. |
| Updates, Revisions | Advance the version number by one if the change is major. (e.g., new software/hardware requiring new duties, tasks, organization restructuring, etc.) |
| Editorial changes | Editorial changes require no modification to version or revision numbers or effective dates. |

| 8. Procedure Style Guidelines |
| --- |
| Step # | Procedural Steps |
|  | The following guidelines are suggestions, not requirements, based on the discretion of the Preparer or designee.* It is assumed that numbered steps are presented in the **required** order of their performance.
* If a particular order of performance is not required, then either state which steps may be performed out of order or use bullets for lists in place of step numbers.
* Ensure that each step or sub-step contains only one action.
* If two or more actions are closely related, or are contingent upon one another, include in the same step.
* Describe within the step itself, actions that are not within the realm of general knowledge of a qualified person performing the task.
* Include instructions for actions to be specifically taken (Open, Close, etc.).
* Highlight negative words (e.g. not, nor, none, neither, and cannot) using lower case and underlining.
* Highlight a word or group of words that require emphasis by underlining and/or bolding.
* Describe what information should be recorded prior to, during, and after completion of the step.
* Describe how to handle discrepancies and problems when encountered.
* Describe action to be taken if a step cannot be completed.
* USE notes to provide descriptive or explanatory information to aid the user in performing a step or task.
* Insert a note just prior to the step or subsection to which it applies.
* When notes are used with Cautions or Warnings, at the same step, they shall appear in this order: Note, Caution then Warning.
* Write the word “NOTE:” in all capital letters, bolded, and followed by a colon.
* Use Cautions and Warnings with instructional steps to alert personnel to possible health hazards, personnel injury, equipment damage, and violations of rules, regulations, or work practices.
* Avoid overuse of Cautions or Warnings.
* Insert Cautions and Warnings prior to the step or subsection to which they apply.
* When Cautions and Warnings appear in the same step, place them in this order: Caution, then Warning.
* Use text boxes for Cautions and Warnings.
* Write the word “CAUTION” in all capital letters, bolded and centered within and at the top of the text box.
* Write the text of Cautions in all capital letters and bolded using the “Normal Style”.
* Write the word “\* \* \* \* \* \* W A R N I N G \* \* \* \* \* ” in all capital letters, bolded, preceded and followed by six asterisks with a space between each character, and centered within and at the top of the text box.
* Write the text of Warnings in all capital letters, bolded, and underlined.
* USE Examples as illustrations to aid in expressing how intended ideas should be patterned as followed:
* Insert Examples following the step or subsection to which they apply.
* Use proper grammatical indicators.
* “e.g.,” means “for example”
* “i.e.,” means “that is” or “in other words”
* Write the word “EXAMPLE” in all capital letters followed by a colon and underlined.

EXAMPLES:**CAUTION****THIS IS A SAMPLE CAUTION BOX AND SHOULD BE USED TO ALERT PERSONNEL TO POSSIBLE EQUIPMENT DAMAGE OR VIOLATIONS OF RULES, REGULATIONS, OR WORK PRACTICES****\* \* \* \* \* \* W A R N I N G \* \* \* \* \* \***THIS IS A SAMPLE WARNING BOX AND SHOULD BE USED TO ALERT PERSONNEL TO POSSIBLE HEALTH HAZARDS OR PERSONNEL INJURY |

9. Attachments

Attachment 1 Change Log (Typical)

|  |
| --- |
| Change Log |
| **Change****Number** | **NP, PU, TC, EC, PR** | **Date assigned** | **Description of change** | **Desk affected** | **Approved****Init/Date** | **TC-ExpireDate** | **BCC Updated Init/Date** | **TCC Updated Init/Date** | **Removed****Initial/Date** |  |
|  |  |  |  |  |  |  |  |  |  |  |
|  |  |  |  |  |  |  |  |  |  |  |
|  |  |  |  |  |  |  |  |  |  |  |
|  |  |  |  |  |  |  |  |  |  |  |
|  |  |  |  |  |  |  |  |  |  |  |
|  |  |  |  |  |  |  |  |  |  |  |
|  |  |  |  |  |  |  |  |  |  |  |
|  |  |  |  |  |  |  |  |  |  |  |
|  |  |  |  |  |  |  |  |  |  |  |
|  |  |  |  |  |  |  |  |  |  |  |

NP = New Procedure PU = Procedure Update TC = Temporary Change PR = Procedure Revision EC = Editorial Chang

Attachment 2 Power Operations Bulletin example

**Power Operations Bulletin # 647**

ERCOT has posted/revised the Transmission and Security Manual.

The Various Changes are shown below.

A copy of the procedure can be found at:

<http://www.ercot.com/mktrules/guides/procedures/index.html>

* **4.1 Transmission Congestion Management**

**Procedure Purpose:** To verify and take corrective action for post-contingency overloads for various conditions.

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| **Protocol Reference** | **3.10.4** | **5.5.1(5)** | **5.5.2** | **6.3.2(2)&(3)(a)** |
| **6.4.6.1** | **6.5.1.1** | **6.5.2** | **6.5.5.2(1)** |
| **6.5.3** | **6.5.7.1.10** | **6.5.7.1.11** | **6.5.7.1.13(3)** |
| **6.5.7.8** | **6.5.7.8(1)** | **6.5.9.1(1)(d)** | **6.5.9 (2)** |
| **6.5.9.2(3)(a)** | **7.1** |  |  |
| **Guide Reference** | **2.2.2** |  |  |  |
|  |  |  |  |
| **NERC Standard** | **IRO-003-2****R1** | **IRO-005-3a****R1.2, R1.3, R1.7, R3, R5, R13, R16, R17** | **IRO-006-5****R1, R4****IRO-006-TRE-1** | **IRO-002-2****R6, R8** |
| **IRO-004-2****R3** | **TOP-001-1a****R1, R2, R5** | **TOP-002-2.1b****R6, R8, R10** | **TOP-004-2****R1, R6, R6.6** |
| **TOP-006-2****R5** |  **TOP-008-1****R1, R2, R4** | **EOP-003-1 R6** |  |

|  |  |  |
| --- | --- | --- |
| **Version: 1**  | **Revision: 25** | **Effective Date: September 27, 2013** |

| **Step** | **Action** |
| --- | --- |
| **NOTE** | Although the steps within the procedure are numbered, the numbering is for indexing purposes and are not sequential in nature. The system operator will determine the sequence of steps, exclude steps, or take any additional actions required to ensure system security based on the information and situational awareness available during both normal and emergency conditions. |

# 10. Addenda

Addendum 1 Task Analysis

Task Analysis

A task analysis can be as detailed as the analyst has time to investigate. A great task analysis is time-consuming and may be quite tedious. However, the greater the detail, the more quickly the procedure preparer and training designer/developer will successfully produce quality procedures and training.

Ideally, a task analysis is performed by direct observation and documentation of the performance of the task under real-life conditions. However, there are significant disadvantages to this method.

* It is very time-consuming.
* The analyst risks interfering with the task performer by asking essential questions during the observation.
* If the success of the task is determined in any way by a time factor, the task may be performed incorrectly.
* If the task is performed rapidly, it is easy to overlook many aspects of the task during a single performance, requiring observation of several performances to complete an analysis.

An effective way to conduct a task analysis with minimal interference with task performance is to “table-top” the analysis with a subject matter expert. Using all available documentation and references, “walk through” the task with at least one SME, and then later, validate the walk through by observing the performance of the task.

The analyst may find that conducting a “content analysis” prior to the walk through will speed the process. Content analysis is done by the analyst using all known reference material to outline the steps of the task without the benefit of SME knowledge. Design documents, vendor manuals, and existing procedures or guidelines are all valid sources of content for this analysis.

Just remember that the goal for the analyst is to gather as much detail as possible about the task, before using that information for the development of a procedure or training. There are no time savings to be had by doing a sloppy analysis. There is a natural order to these activities and skipping them at the beginning will only mean that, later, the development work will be interrupted to complete them.

In general, the following activities are essential to developing an adequate task analysis.

1. Describe the conditions under which the task is performed.
	1. The conditions may vary with the steps of the task.
	2. Identifying the conditions may also identify links to other procedures or tasks, or it may uncover additional steps necessary to establishing the conditions for performance of the task.
2. List the steps required to complete the task.
	1. Be very specific. The smallest detail may turn out to be crucial to decisions that will be made based on the analysis.
3. Describe the standards of success to which the task should be completed.
	1. Policies, other procedures, regulations or laws may establish the standards.

| Addendum 2 Posting Process (Procedures) |
| --- |
| Step # | Procedural Steps |
|  | Login to Web Content ManagementClick on “Page Editors” linkClick on “Operating Procedures” linkClick on “Key Documents” linkClick on the procedure that needs to be updatedUpdate the “Description” area with the date, version and revision dataClick on “Save” buttonClick on the “Close” buttonClick on “Replace” button on the procedure that is being updatedBrowse for file/drop to uploadClick on “Upload” button (In this screen updates made in the description can be verified)Click on “Save” buttonClick on “Close” buttonClick on “Preview” button, then click hyperlink showing the date to preview the changesClick on orange button showing your username and click “Check in”Click on “Approve” buttonClick on “Deploy” button (NOTE: a short delay might be experienced) |
|  | Verify posting by clicking the data hyperlink that appears to the right of the “Deploy” button |

| Addendum 3 Posting Process (Power Operations Bulletins) |
| --- |
| Step # | Procedural Steps |
|  | Login to Web Content ManagementClick on “Content Editors” linkClick the menu button Click on “POBs” button under “Market Bulletins”Click on “Create POB” buttonUpdate the Subject with the name of the POB, version and revision dataUpdate the Bulletin Number using the next sequential numberClick on “Save” buttonClick on “Add File” buttonBrowse for file/drop to uploadClick on “Upload” buttonClick on “Preview” button, then click hyperlink showing the date to preview the changesClick on orange button showing your username and click “Check in”Click on “Approve” buttonClick on “Deploy” button (NOTE: a short delay might be experienced) |
|  | Verify posting by clicking the date hyperlink that appears to the right of the “Deploy” button. |

| Addendum 4 Create Power Operations Bulletins |
| --- |
| Step # | Procedural Steps |
| 1 | Open the procedure that you need to create a Power Operation Bulletin on from the “Approved” folder and save as Power Operation Bulletin XXX in the “Operation Bulletin” folder using the next sequential number. |
| 2 | Select everything **except** the text in the new revised section and delete the text. Then save. |
| 3 | Accept only formatting changes, delete all comments and save. |
| NOTE: | Ensure that all Market sensitive information is redacted from the procedure section prior to posting to the website. |
| 4 | Receive approval from Manager prior to posting to ERCOT Website.Upon approval from Manager post Power Operation Bulletin on the ERCOT WebsiteE-mail Power Operations Bulletin to OWG, ROS, WMS, Operating Standards Internal and System Operators, (Procedure and Ops Bulletin mail list). |