ERCOT Planning Guide

January 1, 2012

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Section 1: Process for Planning Guide Revision

June 1, 2011

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1 PROCESS FOR PLANNING GUIDE REVISION

1.1 Introduction

(1) A request to make additions, edits, deletions, revisions, or clarifications to this Planning Guide, including any attachments and exhibits to this Planning Guide, is called a Planning Guide Revision Request (PGRR). Except as specifically provided in other sections of this Planning Guide, this Section 1, Process for Planning Guide Revision, shall be followed for all PGRRs. ERCOT Members, Market Participants, Public Utility Commission of Texas (PUCT) Staff, Texas Reliability Entity (Texas RE) Staff, ERCOT, and any other Entities are required to utilize the process described herein prior to requesting, through the PUCT or other Governmental Authority, that ERCOT make a change to this Planning Guide, except for good cause shown to the PUCT or other Governmental Authority.

(2) The "next regularly scheduled meeting" of the Planning Working Group (PLWG), the Reliability and Operations Subcommittee (ROS), the Wholesale Market Subcommittee (WMS), the Technical Advisory Committee (TAC), or ERCOT Board shall mean the next regularly scheduled meeting for which required Notice can be timely given regarding the item(s) to be addressed, as specified in the appropriate ERCOT Board or committee procedures.

(3) Throughout the Planning Guide, references are made to the ERCOT Protocols. ERCOT Protocols supersede the Planning Guide and any PGRR must be compliant with the Protocols. The ERCOT Protocols are subject to the revision process outlined in Protocol Section 21, Process for Nodal Protocol Revision.

(4) ERCOT may make non-substantive corrections at any time during the processing of a particular PGRR. Under certain circumstances, however, the Planning Guide can also be revised by ERCOT rather than using the PGRR process outlined in Section 1.

(a) This type of revision is referred to as an "Administrative PGRR" or "Administrative Changes" and shall consist of non-substantive corrections, such as typos (excluding grammatical changes), internal references (including table of contents), improper use of acronyms, and references to ERCOT Protocols, PUCT Substantive Rules, the Public Utility Regulatory Act (PURA), North American Electric Reliability Corporation (NERC) regulations, Federal Energy Regulatory Commission (FERC) rules, etc. Changes to the minimum ERCOT Planning Reserve Margin (PRM) criterion in Section 8.2, Minimum ERCOT Planning Reserve Margin Criterion, as approved by the ERCOT Board, shall be processed as an Administrative PGRR.

(b) ERCOT shall post such Administrative PGRRs to the ERCOT website and distribute the PGRR to the PLWG at least ten Business Days before implementation. If no Entity submits comments to the Administrative PGRR in accordance with paragraph (1) of Section 1.4.3, Planning Working Group Review and Action, ERCOT shall implement it according to paragraph (4) of Section 1.6,

Planning Guide Revision Implementation. If any ERCOT Member, Market Participant, PUCT Staff, Texas RE Staff or ERCOT submits comments to the Administrative PGRR, then it shall be processed in accordance with the PGRR process outlined in Section 1.

1.2 Submission of a Planning Guide Revision Request

The following Entities may submit a Planning Guide Revision Request (PGRR):

(a) Any Market Participant;

(b) Any ERCOT Member;

(c) Public Utility Commission of Texas (PUCT) Staff;

(d) Texas Reliability Entity (Texas RE) Staff;

(e) ERCOT; and

(f) Any other Entity that meets the following qualifications:

(i) Resides (or represent residents) in Texas or operates in the Texas electricity market; and

(ii) Demonstrates that Entity (or those it represents) is affected by the Customer Registration or Renewable Energy Credit (REC) Trading Program sections of the ERCOT Protocols.

1.3 Planning Working Group

(1) The Planning Working Group (PLWG) shall review and recommend action on formally submitted Planning Guide Revision Requests (PGRRs), provided that:

(a) PLWG meetings are open to ERCOT, ERCOT Members, Market Participants, Texas Reliability Entity (Texas RE) Staff, and Public Utility Commission of Texas (PUCT) Staff; and

(b) Each Market Segment is allowed to participate.

(2) Where additional expertise is needed, the PLWG may request that the Reliability and Operations Subcommittee (ROS) refer a PGRR to existing Technical Advisory Committee (TAC) subcommittees, working groups or task forces for review and comment on the PGRR. Suggested modifications or alternative modifications if a consensus recommendation is not achieved by a non-voting working group or task force, to the PGRR should be submitted by the chair or the chair's designee on behalf of the commenting subcommittee, working group or task force as comments on the PGRR for

consideration by PLWG. However, the PLWG shall retain ultimate responsibility for the processing of all PGRRs.

(3) The PLWG shall ensure that the Planning Guide is compliant with the ERCOT Protocols. As such, the PLWG will monitor all changes to the ERCOT Protocols and initiate any PGRRs necessary to bring the Planning Guide in conformance with the ERCOT Protocols. The PLWG will also initiate a Nodal Protocol Revision Request (NPRR) if such a change is necessary to accommodate a proposed PGRR prior to proceeding with that PGRR.

(4) ERCOT shall consult with the PLWG chair to coordinate and establish the meeting schedule for the PLWG. The PLWG shall meet at least once per month, unless no PGRRs were submitted during the prior 24 days, and shall ensure that reasonable advance notice of each meeting, including the meeting agenda, is posted on the ERCOT website.

1.4 Planning Guide Revision Procedure

1.4.1 Review and Posting of Planning Guide Revision Requests

(1) Planning Guide Revision Requests (PGRRs) shall be submitted electronically to ERCOT by completing the designated form provided on the ERCOT website. ERCOT shall provide an electronic return receipt response to the submitter upon receipt of the PGRR.

(2) The PGRR shall include the following information:

(a) Description of requested revision and reason for suggested change;

(b) Impacts and benefits of the suggested change on ERCOT market structure, ERCOT operations, and Market Participants, to the extent that the submitter may know this information;

(c) Impact Analysis (applicable only for a PGRR submitted by ERCOT);

(d) List of affected Planning Guide sections and subsections;

(e) General administrative information (organization, contact name, etc.); and

(f) Suggested language for requested revision.

(3) ERCOT shall evaluate the PGRR for completeness and shall notify the submitter, within five Business Days of receipt, if the PGRR is incomplete, including the reasons for such status. ERCOT may provide information to the submitter that will correct the PGRR and render it complete. An incomplete PGRR shall not receive further consideration until it is completed. In order to pursue the PGRR, a submitter must submit a completed version of the PGRR.

(4) If a submitted PGRR is complete or once a PGRR is completed, ERCOT shall post the PGRR on the ERCOT website and distribute to the Planning Working Group (PLWG) within three Business Days.

1.4.2 Withdrawal of a Planning Guide Revision Request

(1) A submitter may withdraw or request to withdraw a PGRR by submitting a completed Request for Withdrawal form provided on the ERCOT website. ERCOT shall post the submitter's Request for Withdrawal on the ERCOT website within three Business Days of submittal.

(2) The submitter of a PGRR may withdraw the PGRR at any time before the PLWG recommends approval of the PGRR. If the PLWG has recommended approval of the PGRR, the Request for Withdrawal must be approved by the Reliability and Operations Subcommittee (ROS) if the PGRR has not yet been recommended for approval by ROS.

(3) If ROS has recommended approval of the PGRR, the Request for Withdrawal must be approved by the Technical Advisory Committee (TAC) if the PGRR has not yet been approved or recommended for approval by TAC.

(4) If TAC has recommended approval of the PGRR, the Request for Withdrawal must be approved by the ERCOT Board if the PGRR has not yet been approved by the ERCOT Board.

(5) Once a PGRR is approved by the ERCOT Board, such PGRR cannot be withdrawn.

1.4.3 Planning Working Group Review and Action

(1) Any ERCOT Member, Market Participant, Public Utility Commission of Texas (PUCT) Staff, Texas Reliability Entity (Texas RE) Staff or ERCOT may comment on the PGRR.

(2) To receive consideration, comments must be delivered electronically to ERCOT in the designated format provided on the ERCOT website within 14 days from the posting date of the PGRR. Comments submitted after the 14 day comment period may be considered at the discretion of PLWG after these comments have been posted. Comments submitted in accordance with the instructions on the ERCOT website, regardless of date of submission, shall be posted to the ERCOT website and distributed electronically to the PLWG within three Business Days of submittal.

(3) The PLWG shall consider the PGRR at its next regularly scheduled meeting after the end of the 14 day comment period. At such meeting, the PLWG may take action on the PGRR. In considering action on a PGRR, the PLWG may:

(a) Recommend approval of the PGRR as submitted or as modified;

(b) Recommend rejection of the PGRR;

(c) If no consensus can be reached on the PGRR, present options for ROS consideration;

(d) Defer decision on the PGRR; or

(e) Recommend that ROS refer the PGRR to a subcommittee, working group or task force as provided in Section 1.3, Planning Working Group.

(4) Within three Business Days after PLWG takes action, ERCOT shall issue a PLWG Report reflecting the PLWG action and post it to the ERCOT website. The PLWG Report shall contain the following items:

(a) Identification of submitter;

(b) Planning Guide language recommended by the PLWG, if applicable;

(c) Identification of authorship of comments, if applicable;

(d) Proposed effective date of the PGRR;

(e) Recommended priority and rank for any PGRRs requiring an ERCOT project for implementation; and

(f) PLWG action.

1.4.4 Comments to the Planning Working Group Report

(1) Any ERCOT Member, Market Participant, PUCT Staff, Texas RE Staff, or ERCOT may comment on the PLWG Report. Within three Business Days of receipt of comments related to the PLWG Report, ERCOT shall post such comments to the ERCOT website. Comments submitted in accordance with the instructions on the ERCOT website, regardless of date of submission, shall be posted on the ERCOT website within three Business Days of submittal.

(2) The comments on the PLWG Report will be considered at the next regularly scheduled PLWG or ROS meeting where the PGRR is being considered.

1.4.5 Planning Guide Revision Request Impact Analysis

(1) ERCOT shall submit to PLWG an initial Impact Analysis based on the original language in the PGRR with any ERCOT-sponsored PGRR. The initial Impact Analysis will provide PLWG with guidance as to what ERCOT computer systems, operations, or business functions could be affected by the PGRR as submitted.

(2) If PLWG recommends approval of a PGRR, ERCOT shall prepare an Impact Analysis based on the proposed language in the PLWG Report. If ERCOT has already prepared an

Impact Analysis, ERCOT shall update the existing Impact Analysis, if necessary, to accommodate the language recommended for approval in the PLWG Report.

(3) The Impact Analysis shall assess the impact of the proposed PGRR on ERCOT computer systems, operations, or business functions and shall contain the following information:

(a) An estimate of any cost and budgetary impacts to ERCOT for both implementation and ongoing operations;

(b) The estimated amount of time required to implement the PGRR;

(c) The identification of alternatives to the PGRR that may result in more efficient implementation; and

(d) The identification of any manual workarounds that may be used as an interim solution and estimated costs of the workaround.

(4) Unless a longer review period is warranted due to the complexity of the proposed PLWG Report, ERCOT shall issue an Impact Analysis for a PGRR for which PLWG has recommended approval prior to the next regularly scheduled PLWG meeting. ERCOT shall post the results of the completed Impact Analysis on the ERCOT website. If a longer review period is required by ERCOT to complete an Impact Analysis, ERCOT shall submit comments with a schedule for completion of the Impact Analysis to the PLWG.

1.4.6 Planning Working Group Review of Impact Analysis

(1) After ERCOT posts the results of the Impact Analysis, PLWG shall review the Impact Analysis at its next regularly scheduled meeting. PLWG may revise its PLWG Report after considering the information included in the Impact Analysis or additional comments received on the PLWG Report.

(2) After consideration of the Impact Analysis and the PLWG Report, ERCOT shall issue a revised PLWG Report and post it on the ERCOT website within three Business Days of the PLWG consideration of the Impact Analysis and the PLWG Report. If PLWG revises the proposed PGRR, ERCOT shall update the Impact Analysis, if necessary, and issue the updated Impact Analysis to ROS. If a longer review period is required for ERCOT to update the Impact Analysis, ERCOT shall submit comments with a schedule for completion of the Impact Analysis to ROS.

(3) If the PGRR requires an ERCOT project for implementation, at the same meeting, PLWG shall assign a recommended priority and rank for the associated project.

1.4.7 Reliability and Operations Subcommittee Vote and Wholesale Market Subcommittee Review

(1) ROS shall consider any PGRRs that PLWG has submitted to ROS for consideration for which both a PLWG Report and an Impact Analysis (as updated if modified by PLWG under Section 1.4.6, Planning Working Group Review of Impact Analysis) have been posted on the ERCOT website. The following information must be included for each PGRR considered by ROS:

(a) The PLWG Report and Impact Analysis; and

(b) Any comments timely received in response to the PLWG Report.

(2) The quorum and voting requirements for ROS action are set forth in the Technical Advisory Committee Procedures. In considering action on a PLWG Report, ROS shall:

(a) Recommend approval of the PGRR as recommended in the PLWG Report or as modified by ROS;

(b) Reject the PGRR;

(c) Defer decision on the PGRR;

(d) Remand the PGRR to the PLWG with instructions; or

(e) Refer the PGRR to another ROS working group or task force or another TAC subcommittee with instructions.

(3) If a motion is made to recommend approval of a PGRR and that motion fails, the PGRR shall be deemed rejected by ROS unless at the same meeting ROS later votes to recommend approval of, defer, remand, or refer the PGRR. If a motion to recommend approval of a PGRR fails via email vote according to the Technical Advisory Committee Procedures, the PGRR shall be deemed rejected by ROS unless at the next regularly scheduled ROS meeting or in a subsequent email vote prior to the meeting, ROS votes to recommend approval of, defer, remand, or refer the PGRR. The rejected PGRR shall be subject to appeal pursuant to Section 1.4.13, Appeal of Action.

(4) Within three Business Days after ROS takes action on the PGRR, ERCOT shall issue a ROS Report reflecting the ROS action and post it on the ERCOT website. The ROS Report shall contain the following items:

(a) Identification of the submitter of the PGRR;

(b) Modified Planning Guide language proposed by ROS, if applicable;

(c) Identification of the authorship of comments, if applicable;

(d) Proposed effective date(s) of the PGRR;

(e) Recommended priority and rank for any PGRR requiring an ERCOT project for implementation;

(f) PLWG action; and

(g) ROS action.

(5) The Wholesale Market Subcommittee (WMS) shall monitor and review PGRRs as they work through the PLWG process and may submit comments to the process as appropriate.

1.4.8 ERCOT Impact Analysis Based on Reliability and Operations Subcommittee Report

ERCOT shall review the ROS Report and, if necessary, update the Impact Analysis as soon as practicable. If the PGRR does not require a project assigned to the Unfunded Project List, ERCOT shall issue the updated Impact Analysis, if applicable, to TAC and post it on the ERCOT website. If a longer review period is required for ERCOT to update the Impact Analysis, ERCOT shall submit comments with a schedule for completion of the Impact Analysis to TAC.

1.4.9 PRS Review of Project Prioritization

At the next regularly scheduled Protocol Revision Subcommittee (PRS) meeting after ROS recommends approval of a PGRR that requires an ERCOT project for implementation, the PRS shall assign a recommended priority and rank for the associated project.

1.4.10 Technical Advisory Committee Vote

(1) TAC shall consider any PGRRs that ROS has submitted to TAC for consideration for which both a ROS Report and an Impact Analysis and any new or unresolved comments submitted by WMS (as updated if modified by ROS under Section 1.4.7, Reliability and Operations Subcommittee Vote and Wholesale Market Subcommittee Review) have been posted on the ERCOT website. The following information must be included for each PGRR considered by TAC:

(a) The ROS Report and Impact Analysis;

(b) The recommended PRS priority and rank, if an ERCOT project is required; and

(c) Any comments timely received in response to the ROS Report.

(2) The quorum and voting requirements for TAC action are set forth in the Technical Advisory Committee Procedures. In considering action on a ROS Report, TAC shall:

(a) Recommend approval of the PGRR as recommended in the ROS Report (with due consideration to comments provided by WMS) or as modified by TAC, including

modification of the recommended priority and rank if the PGRR requires a project;

(b) Reject the PGRR;

(c) Defer decision on the PGRR;

(d) Remand the PGRR to ROS with instructions; or

(e) Refer the PGRR to another TAC subcommittee or a TAC working group or task force with instructions.

(3) If a motion is made to recommend approval of a PGRR and that motion fails, the PGRR shall be deemed rejected by TAC unless at the same meeting TAC later votes to recommend approval of, defer, remand, or refer the PGRR. If a motion to recommend approval of a PGRR fails via email vote according to the Technical Advisory Committee Procedures, the PGRR shall be deemed rejected by TAC unless at the next regularly scheduled TAC meeting or in a subsequent email vote prior to such meeting, TAC votes to recommend approval of, defer, remand, or refer the PGRR. The rejected PGRR shall be subject to appeal pursuant to Section 1.4.13, Appeal of Action.

(4) Within three Business Days after TAC takes action on a PGRR, ERCOT shall issue a TAC Report reflecting the TAC action and post it on the ERCOT website. The TAC Report shall contain the following items:

(a) Identification of the submitter of the PGRR;

(b) Modified Planning Guide language proposed by TAC, if applicable;

(c) Identification of the authorship of comments, if applicable;

(d) Proposed effective date(s) of the PGRR;

(e) Priority and rank for any PGRR requiring an ERCOT project for implementation;

(f) ROS action; and

(g) TAC action.

(5) If TAC recommends approval of a PGRR that does not require an ERCOT project for implementation or requires an ERCOT project which can be performed in the current ERCOT budget cycle based upon its priority and rank, ERCOT shall forward the TAC Report to the ERCOT Board for consideration pursuant to Section 1.4.12, ERCOT Board Vote.

(6) If TAC recommends approval of a PGRR that requires a project for implementation that cannot be funded within the current ERCOT budget cycle, ERCOT shall prepare a TAC Report and post the report on the ERCOT website within three Business Days of the TAC

recommendation concerning the PGRR. ERCOT shall assign the PGRR recommended for approval to the Unfunded Project List until the ERCOT Board approves an annual ERCOT budget in a manner that indicates funding would be available in the new budget cycle to implement the project if approved by the ERCOT Board; in such case, the TAC Report would be provided at the next ERCOT Board meeting following such budget approval for the ERCOT Board's consideration under Section 1.4.12.

(7) Notwithstanding the above, a PGRR on the Unfunded Project List may be removed from the list and provided to the ERCOT Board for approval in the same manner as Nodal Protocol Revision Requests (NPRRs) or System Change Requests (SCRs) may be removed from the list as set forth in Protocol Section 21.9, Review of Project Prioritization, Review of Unfunded Project List, and Annual Budget Process.

(8) ERCOT shall maintain the Unfunded Project List to track projects that cannot be funded in the current ERCOT budget cycle.

(9) Any PGRR recommended for approval by TAC but assigned to the Unfunded Project List may be challenged by appeal as otherwise set forth in Section 1.4.13.

1.4.11 ERCOT Impact Analysis Based on Technical Advisory Committee Report

ERCOT shall review the TAC Report and, if necessary, update the Impact Analysis as soon as practicable. If the PGRR does not require a project assigned to the Unfunded Project List, ERCOT shall issue the updated Impact Analysis, if applicable, to the ERCOT Board and post it on the ERCOT website. If a longer review period is required for ERCOT to update the Impact Analysis, ERCOT shall submit comments with a schedule for completion of the Impact Analysis to the ERCOT Board.

1.4.12 ERCOT Board Vote

(1) Upon issuance of a TAC Report and Impact Analysis to the ERCOT Board, the ERCOT Board shall review the TAC Report and the Impact Analysis at the following month's regularly scheduled meeting. For Urgent PGRRs, the ERCOT Board shall review the TAC Report and Impact Analysis at the next regularly scheduled meeting, unless a special meeting is required due to the urgency of the PGRR.

(2) The quorum and voting requirements for ERCOT Board action are set forth in the ERCOT Bylaws. In considering action on a TAC Report, the ERCOT Board shall:

(a) Approve the PGRR as recommended in the TAC Report or as modified by the ERCOT Board;

(b) Reject the PGRR;

(c) Defer decision on the PGRR; or

(d) Remand the PGRR to TAC with instructions.

(3) If a motion is made to approve a PGRR and that motion fails, the PGRR shall be deemed rejected by the ERCOT Board unless at the same meeting the ERCOT Board later votes to approve, defer, or remand the PGRR. The rejected PGRR shall be subject to appeal pursuant to Section 1.4.13, Appeal of Action.

(4) If the PGRR is approved by the ERCOT Board, as recommended by TAC or as modified by the ERCOT Board, the ERCOT Board shall review and approve or modify the proposed effective date.

(5) Within three Business Days after the ERCOT Board takes action on a PGRR, ERCOT shall issue a Board Report reflecting the ERCOT Board action and post it on the ERCOT website.

1.4.13 Appeal of Action

(1) Any ERCOT Member, Market Participant, PUCT Staff, Texas RE Staff or ERCOT may appeal a PLWG action to recommend rejection of, defer, or recommend referral of a PGRR directly to ROS. Such appeal to the ROS must be submitted electronically to ERCOT by completing the designated form provided on the ERCOT website within ten Business Days after the date of the relevant PLWG appealable event. ERCOT shall reject appeals made after that time. ERCOT shall post appeals on the ERCOT website within three Business Days of receiving the appeal. If the appeal is submitted to ERCOT at least 11 days before the next regularly scheduled ROS meeting, ERCOT shall place the appeal on the agenda of the next regularly scheduled ROS meeting. If the appeal is submitted to ERCOT less than 11 days before the next regularly scheduled ROS meeting, the ROS will hear the appeal at the next subsequent regularly scheduled ROS meeting. An appeal of a PGRR to ROS suspends consideration of the PGRR until the appeal has been decided by ROS.

(2) Any ERCOT Member, Market Participant, PUCT Staff, Texas RE Staff, or ERCOT may appeal a ROS action to reject, defer, remand or refer a PGRR directly to TAC. Such appeal to the TAC must be submitted electronically to ERCOT by completing the designated form provided on the ERCOT website within ten Business Days after the date of the relevant ROS appealable event. ERCOT shall reject appeals made after that time. ERCOT shall post appeals on the ERCOT website within three Business Days of receiving the appeal. If the appeal is submitted to ERCOT at least 11 days before the next regularly scheduled TAC meeting, ERCOT shall place the appeal on the agenda of the next regularly scheduled TAC meeting. If the appeal is submitted to ERCOT less than 11 days before the next regularly scheduled TAC meeting, TAC will hear the appeal at the next subsequent regularly scheduled TAC meeting. An appeal of a PGRR to TAC suspends consideration of the PGRR until the appeal has been decided by TAC.

(3) Any ERCOT Member, Market Participant, PUCT Staff, Texas RE Staff or ERCOT may appeal a TAC action to reject, defer, remand, or refer a PGRR directly to the ERCOT Board. Appeals to the ERCOT Board shall be processed in accordance with the ERCOT

Board Policies and Procedures. An appeal of a PGRR to the ERCOT Board suspends consideration of the PGRR until the appeal has been decided by the ERCOT Board.

(4) Any ERCOT Member, Market Participant, PUCT Staff or Texas RE Staff may appeal any decision of the ERCOT Board regarding a PGRR to the PUCT or other Governmental Authority. Such appeal to the PUCT or other Governmental Authority must be made within any deadline prescribed by the PUCT or other Governmental Authority, but in any event no later than 35 days of the date of the relevant ERCOT Board appealable event. Notice of any appeal to the PUCT or other Governmental Authority must be provided, at the time of the appeal, to ERCOT's General Counsel. If the PUCT or other Governmental Authority rules on the PGRR, ERCOT shall post the ruling on the ERCOT website.

1.5 Urgent Requests

(1) The party submitting a Planning Guide Revision Request (PGRR) may request that the PGRR be considered on an urgent timeline ("Urgent") only when the submitter can reasonably show that an existing Planning Guide provision is impairing or could reasonably impair ERCOT System reliability or wholesale or retail market operations, or is causing or could imminently cause a discrepancy between a Settlement formula and a provision of the ERCOT Protocols.

(2) The Reliability and Operations Subcommittee (ROS) may designate the PGRR for Urgent consideration if a submitter requests Urgent status or upon valid motion in a regularly scheduled meeting of the ROS. Criteria for designating a PGRR as Urgent are that the PGRR:

(a) Requires immediate attention due to:

(i) Serious concerns about ERCOT System reliability or market operations under the unmodified language; or

(ii) The crucial nature of a Settlement activity conducted pursuant to any Settlement formula; and

(b) Is of a nature that allows for rapid implementation without negative consequence to the reliability and integrity of the ERCOT System or market operations.

(3) ERCOT shall prepare an Impact Analysis for Urgent PGRRs as soon as practicable.

(4) ROS or the Planning Working Group (PLWG) shall consider the Urgent PGRR and Impact Analysis, if available, at the next regularly scheduled ROS or PLWG meeting, or at a special meeting called by the ROS or PLWG chair to consider the Urgent PGRR. The Wholesale Market Subcommittee (WMS) may monitor Urgent PGRRs and shall submit comments as appropriate.

(5) If the submitter desires to further expedite processing of the PGRR, a request for voting via electronic mail may be submitted to the ROS chair. The ROS chair may grant the request for voting via electronic mail. Such voting shall be conducted pursuant to the Technical Advisory Committee Procedures. If ROS recommends approval of an Urgent PGRR, ERCOT shall issue an ROS Report reflecting the ROS action and post it on the ERCOT website within three Business Days after ROS takes action. The ROS chair may request action from ROS to accelerate or alter the procedures described herein, as needed, to address the urgency of the situation.

(6) Any revisions to the Planning Guide that take effect pursuant to an Urgent request shall be subject to an Impact Analysis pursuant to Section 1.4.8, ERCOT Impact Analysis Based on Reliability and Operations Subcommittee Report, and ERCOT Board consideration pursuant to Section 1.4.12, ERCOT Board Vote.

1.6 Planning Guide Revision Implementation

(1) Upon ERCOT Board approval, ERCOT shall implement Planning Guide Revision Requests (PGRRs) on the first day of the month following ERCOT Board approval, unless otherwise provided in the Board Report for the approved PGRR.

(2) For such other PGRRs, the Impact Analysis shall provide an estimated implementation date and ERCOT shall provide Notice as soon as practicable, but no later than ten days prior to the actual implementation, unless a different notice period is required in the Board Report for the approved PGRR.

(3) ERCOT shall implement an Administrative PGRR on the first day of the month following the end of the ten Business Day posting requirement outlined in Section 1.1, Introduction.

ERCOT Planning Guide

Section 2: Definitions and Acronyms

September 1, 2011

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2 DEFINITIONS AND ACRONYMS

2.1 DEFINITIONS

Relevant terms and definitions used in the Planning Guide can be found in Protocol Section 2, Definitions and Acronyms. The terms within this Section 2.1 contains terms not defined in Protocols.

LINKS TO DEFINITIONS:

A, B, C, D, E, F, G, H, I, J, K, L, M, N, O, P, Q, R, S, T, U, V, W, X, Y, Z;

List of Acronyms

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Credible Single Contingency for Transmission Planning (for operations planning purposes Credible Single Contingency is defined in the Operating Guides)

(1) A single facility, comprised of transmission line, auto transformer, or other associated pieces of equipment. This includes multiple equipment Outaged or interrupted during a single fault (SFME).

(2) The Forced Outage of a DCKT in excess of 0.5 miles in length (either without a fault or subsequent to a normally-cleared non-three-phase fault) with all other facilities normal.

(3) Any Generation Resource:

(a) A combined-cycle facility shall be considered a single Generation Resource; or

(b) Each unit of a combined-cycle facility will be considered a single Generation Resource if the combustion turbine and the steam turbine can operate separately, as stated in the Resource registration on the Market Information System (MIS) Public Area.

(4) With any single Generation Resource unavailable, and with any other generation preemptively redispatched, the contingency loss of a single Transmission Facility (either without a fault or subsequent to a normally-cleared non-three-phase fault) with all other facilities normal.

(5) Single contingency conditions defined in North American Electric Reliability Corporation (NERC) Reliability Standards and any subsequent revisions.

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Planning Reserve Margin (PRM)

The net of total capacity for the season (summer or winter) less firm peak Load for the season divided by firm peak Load for the season (expressed as a percentage).

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2.2 ACRONYMS AND ABBREVIATIONS

PRM	Planning Reserve Margin
TCEQ	Texas Commission on Environmental Quality

ERCOT Planning Guide

Section 3: [RESERVED]

May 1, 2011

3 [RESERVED]

ERCOT Planning Guide

Section 4: Transmission Planning Criteria

September 1, 2011

4 TRANSMISSION PLANNING CRITERIA

4.1 Introduction

(1) ERCOT employs both reliability criteria and economic criteria in evaluating the need for transmission system improvements. The economic criteria are included in Protocol Section 3.11.2, Planning Criteria. This Planning Guide provides the reliability criteria.

(2) The ERCOT System consists of those generation and Transmission Facilities (60 kV and higher voltages) that are controlled by individual Market Participants and that function as part of an integrated and coordinated system.

(3) To maintain reliable operation of the ERCOT System, it is necessary that all stakeholders observe and subscribe to certain minimum planning criteria. The criteria set forth herein, combined with the applicable North American Electric Reliability Corporation (NERC) Reliability Standards, constitute the aforementioned minimum planning criteria. Tests outlined herein shall be performed to determine conformance to these minimum criteria; however, ERCOT recognizes that events more severe than those outlined in these criteria could cause grid separation and other tests may also be performed.

(4) The complexity and uncertainty inherent in the planning and operation of the ERCOT System make exhaustive studies impracticable; therefore, to gain maximum benefit from the limited number of tests performed, the selection of the specific tests and the frequency of their performance will be made solely upon the basis of the expected value of the reliability information obtainable from the test.

(5) It is the responsibility of each Transmission Service Provider (TSP) to perform steady-state, short circuit and dynamic tests appropriate to ensure the reliability of its Transmission Facilities and implement appropriate solutions. Further, the TSP may recommend additional studies be performed by ERCOT or through the Reliability and Operations Subcommittee (ROS). Additional tests which may affect multiple TSPs or the ERCOT System as a whole may be studied. Upon consideration of such recommendations, ERCOT and the ROS shall coordinate the performance of such studies, as necessary, to assess the reliability of the planned ERCOT System.

(6) ERCOT in coordination with the TSPs shall determine and demonstrate the need for any static and/or dynamic Reactive Power capability in excess of the explicit requirements of the Protocols and Operating Guides that is necessary to ensure compliance with the planning criteria. ERCOT shall establish specific TSP responsibility for any associated facility additions.

(7) The base cases created by the Steady-State Working Group (SSWG), System Protection Working Group (SPWG), and ERCOT are available for use by Market Participants.

(8) If a TSP has its own planning criteria in addition to those defined in this Planning Guide, the TSP shall provide documentation of those criteria to ERCOT. ERCOT shall post the documentation on the Planning and Operations Information website. The TSP shall notify ERCOT of any changes to their planning criteria and provide revised documentation within 30 days of such change.

4.1.1 Reliability Criteria

4.1.1.1 Planning Assumptions

The Credible Single Contingency for Transmission Planning studies will be performed for reasonable variations of Load level, generation schedules, planned transmission line Maintenance Outages, and anticipated power transfers. At a minimum, this should include projected Loads for the upcoming summer and winter seasons and a five-year planning horizon. The TSPs involved should plan to resolve any unacceptable study results through the provision of Transmission Facilities, the temporary alteration of operating procedures (i.e., Remedial Action Plans (RAPs)), Special Protection Systems (SPSs), or other means as appropriate.

4.1.1.2 Performance Requirements for Credible Single Contingencies for Transmission Planning

Credible Single Contingencies for Transmission Planning as defined in Section 2.1, Definitions, of this Planning Guide, shall not result in the following:

(a) Cascading or uncontrolled Outages;

(b) Instability of Generation Resources at multiple plant locations; or

(c) Interruption of service to firm demand or generation other than that isolated by the Credible Single Contingency for Transmission Planning, following the execution of all automatic operating actions such as relaying and SPSs. Furthermore, the loss should result in no damage to or failure of equipment and, following the execution of specific non-automatic predefined operator-directed actions (i.e., RAPs), such as generation schedule changes or curtailment of interruptible Load, should not result in applicable voltage limits or thermal ratings associated with the Transmission Facility being exceeded.

4.1.1.3 Voltage Stability Margin

Voltage stability margin shall be sufficient to maintain post-transient voltage stability under the following study conditions for each ERCOT or TSP-defined areas:

(a) A 5% increase in Load above expected peak supplied from resources external to the ERCOT or TSP-defined areas; and NERC Category A or B operating conditions; and

(b) A 2.5% increase in Load above expected peak supplied from resources external to the ERCOT or TSP-defined areas and NERC Category C operating conditions.

4.1.2 ERCOT Application of NERC Standards for System Assessments

4.1.2.1 Category C

(1) Bus Section Definition - "Bus Section" shall be interpreted to mean any section of bus work, which would be isolated by normal relay/breaker operation when faulted.

(2) Manual System Adjustments Definition - "Manual System Adjustments" shall be interpreted to include only operator actions that:

(a) Would be made no later than one hour after clearing of the first fault;

(b) Are made using remote control capability or communications with other operators having such capability;

(c) Include circuit switching, changes in the schedules of Generation Resources operating at clearing of the first fault, and changes in the schedules of other Generation Resources that can contribute within one hour; and

(d) Exclude the physical repair or replacement of damaged equipment and the starting of any Generation Resource that cannot contribute within one hour.

(3) Planned Loss of Demand or Curtailed Firm Transfer Definition - All Load interruption, generator tripping, or generation schedule changes must be either automatic or prearranged with associated written operating procedures. Actions must be executable in time to avoid any equipment damage or safety violations, but in any case within 30 minutes of fault clearing.

(4) Cascading Outage Definition - Cascading Outages are defined as the uncontrolled loss of any system facilities or load, whether because of thermal overload, voltage collapse, or loss of synchronism, except those occurring as a result of fault isolation.

(5) Implementation Guidelines - Evaluation of all the possible combination of facility Outages under Category C is not required. Each TSP with bulk Transmission Facilities will evaluate one or more Category C contingencies annually. The contingencies selected may be based on the results of related studies or actual events. In either case, the selected contingencies must indicate more severe results or impacts based on the engineering judgment of the facility owner, ERCOT or any TSP. An explanation of why

any remaining contingencies would produce less severe system results shall be available as supporting information.

4.1.2.2 Category D

(1) For the purpose of evaluating the consequences resulting from a Category D event, a Large Load or Major Load Center is an electrical demand of between 50 and 500 MW. This may be a large single Load or a group of electrically close Loads. The loss of this demand will not include any other system elements other than those directly connected.

(2) Evaluations of Category D contingencies are not required to be performed annually. Evaluations should be performed for the following:

(a) Contingencies previously studied for which the conditions assumed in the study have changed significantly and which may adversely affect the results of the study; and

(b) Contingencies not previously studied that, based on the results of related studies or actual events may in the engineering judgment of the facility owner, ERCOT or any TSP, have unacceptable consequences.

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5 [RESERVED]

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Section 6: Data/Modeling

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6 DATA/MODELING

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6.4 Transmission Project Information and Tracking Report and Data Requirements

6.4.1 Transmission Project Information and Tracking Report

(1) The ERCOT Transmission Project and Information Tracking (TPIT) report presents the current quarterly status of the transmission projects (60 kV and above) that have a material impact to the flow of power in the ERCOT System. The TPIT report communicates the status to the stakeholders through the TPIT Database. The TPIT Database has four primary sections:

(a) Future Projects;

(b) Completed Projects;

(c) Cancelled Projects; and

(d) Five-Year Transmission Plan Projects.

(2) Transmission projects listed in the current TPIT Future Projects and Completed Project sections are generally modeled in the current set of Steady State Working Group (SSWG) Load flow cases used for transmission planning studies except for, but not limited to the following exceptions:

(a) Any project that requires Regional Planning Group (RPG) review and has not completed the review process;

(b) Any project with a projected in-service date beyond the five-year planning horizon; or

(c) Any project that consists of only a Special Protection System (SPS) (which is not typically modeled);

(d) In addition, each project listing includes a data field that delineates whether that project is included in the aforementioned SSWG cases.

6.4.2 ERCOT Responsibilities

ERCOT shall prepare TPIT updates using data supplied by each Transmission Service Provider (TSP), or it's Designated Agent. ERCOT shall maintain a section within the TPIT Database that describes each data element as well as identify the Entity responsible for supplying the data within each data element. The updated TPIT Database shall be posted quarterly on the Market Information System (MIS) Public Area. The format and schedule for data collection and verification of the TPIT Database shall be determined by ERCOT and communicated to the appropriate Market Participants in a timely manner.

6.4.3 TSP Responsibilities

TPIT provides information on transmission projects that are included in current TSP plans or included in the ERCOT Five-Year Transmission Plan. Each TSP shall provide information for its transmission projects to ERCOT as outlined in the TPIT Procedures.

6.4.4 Five-Year Transmission Plan Projects in Transmission Project Information and Tracking Report

Each year, with input from stakeholders, ERCOT develops a Five-Year Transmission Plan that identifies a set of reliability-driven and economic-driven transmission projects based on the current SSWG planning Base Cases. Transmission projects identified in the Five-Year Transmission Plan are typically at varying stages within the planning process and thus, are subject to change. When a Five-Year Plan Transmission Plan project is deemed appropriate for inclusion in the SSWG planning Base Cases, the TSP shall initiate inclusion of the project in the Future Projects section of TPIT, and ERCOT shall assign a TPIT project number. The project shall also remain in the Five-Year Transmission Plan section of the TPIT.

6.5 Annual Load Data Request

(1) The Transmission and/or Distribution Service Provider (TDSP) or its Designated Agent must provide Load data each year to allow necessary ERCOT System reliability analysis and planning and to meet requirements of North American Electric Reliability Corporation (NERC). Each TDSP or its Designated Agent is responsible for providing historical and forecasted Load data to ERCOT for all Loads connected to its system as outlined in the Annual Load Data Request Form Instructions. Data supplied in the Annual Load Data Request (ALDR) is considered Protected Information.

(2) Some or all of the following factors may be considered when developing Load forecast data:

(a) Economic;

(b) Demographic;

(c) Customer trends;

(d) Conservation;

(e) Improvements in the efficiency of electrical energy uses;

(f) Other changes in the end uses of electricity; and

(g) Weather effects.

(3) Each Distribution Service Provider (DSP) or its Designated Agent directly interconnected with the ERCOT Transmission Grid shall provide annual Load forecasts to ERCOT as outlined in the Annual Load Data Request Form Instructions.

(4) For each substation not owned by either a Transmission Service Provider (TSP) or a DSP, the owner shall provide a substation Load forecast to the directly-connected TSP sufficient to allow it to adequately include that substation in its ALDR response.

(5) The TDSP or its Designated Agent shall coordinate with the appropriate working group as described in the Annual Load Data Request Form Instructions for issues with data submissions.

(6) Load data that is incomplete, not timely submitted on the schedule, or not in the format defined in the Annual Load Data Request Form Instructions will be considered missing data. For these missing Load data, ERCOT shall calculate Loads based on historical data and insert these Loads into the Load flow cases during Data Set A and Data Set B annual updates.

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6.8 Resource Registration Procedures

In accordance with Protocol Sections 3.7, Resource Parameters, 3.10, Network Operations Modeling and Telemetry, and 16.5, Registration of a Resource Entity, a Resource Entity shall register each All-Inclusive Generation Resource with ERCOT. The Resource Entity shall submit Resource registration data and information through the registration process made available on the ERCOT website and the Market Information System (MIS) Public Area.

6.8.1 Resource Registration

(1) A Resource Entity shall properly complete the Resource registration for each Generation Resource that contains all pertinent data for all Generation Resources at that site prior to

inclusion in applicable systems that model Resources. Load Resources represented by the Resource Entity shall be registered through the Resource registration process.

(2) ERCOT shall post a detailed Resource Registration Guide on the ERCOT website that provides detailed instructions and explanations for the various data types required for Resource registration.

(3) ERCOT shall make available related documents for Resource registration on the ERCOT website and shall notify Market Participants when changes are made to the Resource registration process and requirements, including the Resource registration forms and Resource Registration Guide.

(4) As required by the Generation Interconnection or Change Request Procedure, Generation Resources shall provide accurate initial data for inclusion in the ERCOT Network Operations Model. The data will be used to model future generation for Steady-State Working Group (SSWG), Dynamics Working Group (DWG), and System Protection Working Group (SPWG) base cases.

[PGRR009: Replace paragraph (4) above upon implementation of Planning Guide Revision Request (PGRR) 008, New Planning Guide Section 5 – Generation Resource Interconnection or Change Request):]

(4) As required by Section 5, Generation Resource Interconnection or Change Request, Generation Resources shall provide accurate initial data for inclusion in the ERCOT Network Operations Model. The data will be used to model future generation for Steady-State Working Group (SSWG), Dynamics Working Group (DWG), and System Protection Working Group (SPWG) base cases.

(5) A Resource Entity shall revise the Resource registration form as necessary to reflect changes in any data related to a Generation or Load Resource.

6.8.2 Resource Registration Process

(1) A Resource Entity shall submit and authorize the Resource registration form as described in the Resource Registration Guide located on the ERCOT website.

(2) Upon receipt of the Resource registration form, ERCOT shall review the completeness and provide notice of acceptance and/or deficiencies to the Resource Entity.

(3) ERCOT shall provide notice to the Resource Entity if the Resource registration form is approved, which is not the same as an “approved” Network Operations Model Change Request (NOMCR). The approval of the Resource registration form only means that the registered data moves to the next step of being converted to a NOMCR.

(4) If ERCOT's notice reports deficiencies, the Resource Entity shall make necessary changes specified and re-submit the Resource registration form and as many times as necessary until approval of the total set of registered data is granted.

(5) Upon approval of the Resource registration form, ERCOT shall provide the Resource Entity with the model ready date for which the Resource registration form will be implemented in production.

(6) If a Resource Entity desires that the approved Resource registration form become effective earlier than the schedule established in Protocol Section 3.10.4, ERCOT Responsibilities, it may submit a request for interim update as described in the Resource Registration Guide.

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May 1, 2011

7 [RESERVED]

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Section 8: Planning Reserve Margin

May 1, 2011

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8 PLANNING RESERVE MARGIN

8.1 ERCOT Planning Reserve Margin

ERCOT shall calculate the Planning Reserve Margin (PRM) for each Peak Load Season (summer months are June, July August and September; winter months are December, January and February) using the following equation:

$$\mathbf{PRM}_{s,i} = \mathbf{(TOTCAP}_{s,i} \mathbf{- FIRMPKLD}_{s,i}\mathbf{i) / FIRMPKLD}_{s,i}$$

The above variables are defined as follows:

Variable	Unit	Definition
PRM $_{s,i}$	%	*Planning Reserve Margin*—The Planning Reserve Margin for the peak Load season *s* for year *i*.
TOTCAP $_{s,i}$	MW	*Total Capacity*—Total Capacity available during the peak Load season *s* for the year *i*.
FIRMPKLD $_{s,i}$	MW	*Firm Peak Load*—Firm Peak Load for the peak Load season *s* for the year *i*.
i	None	Year.
s	None	Peak Load Season as defined above.

8.2 Minimum ERCOT Planning Reserve Margin Criterion

The minimum ERCOT Planning Reserve Margin (PRM) criterion is 13.75%.

8.3 ERCOT Planning Reserve Margin Calculation Methodology

ERCOT shall prepare and publish on the ERCOT website, at least annually, a report containing an estimate of the Planning Reserve Margin (PRM) for the current summer and winter Peak Load Seasons as well as a minimum of ten future summer and winter peak Load periods. The format and content of this report shall be developed by ERCOT, subject to Technical Advisory Committee (TAC) approval. The estimate of the PRM shall be based on the methodology in Section 8.3.1, Peak Load Estimate, and Section 8.3.2, Total Capacity Estimate.

8.3.1 Peak Load Estimate

ERCOT shall prepare, at least annually, an estimate of the total peak Load for both summer and winter peak Load periods for the current year and a minimum of ten future years using an econometric forecast, taking into account econometric inputs, weather conditions, demographic data and other variables as deemed appropriate by ERCOT. The firm peak Load forecast shall be determined by the following equation:

$$\mathbf{FIRMPKLD}_{s,i} = \mathbf{TOTPKLD}_{s,i} \mathbf{- LRRRS}_{s,i} \mathbf{- LRNSRS}_{s,i} \mathbf{- EILS}_{s,i} \mathbf{- CLR}_{s,i} \mathbf{- ENERGYEFF}_{s,i}$$

The above variables are defined as follows:

Variable	Unit	Definition
$FIRMPKLD_{s, i}$	MW	*Firm Peak Load Estimate*—The Firm Peak Load Estimate for the Peak Load Season *s* for the year *i.*
$TOTPKLD_{s, i}$	MW	*Total Peak Load Estimate*—The Total Peak Load Estimate for the Peak Load Season *s* for the year *i.*
$LRRRS_{s, i}$	MW	*Load Resource providing Responsive Reserve (RRS)*—The amount of RRS a Load Resource is providing for the Peak Load Season *s* for the year *i*.
$LRNSRS_{s, i}$	MW	*Load Resource providing Non-Spinning Reserve (Non-Spin)*— The amount of Non-Spin a Load Resource is providing for the Peak Load Season *s* for the year *i.*
$EILS_{s, i}$	MW	*Emergency Interruptible Load Service (EILS)*— The amount of EILS for the peak Load Season *s* for the year *i* based on: (a) For the winter Peak Load Season of the current year, the amount of EILS procured by ERCOT for the October to January EILS Contract Period using the simple average of two time period procurements (Business Hours and Non-Business Hours); (b) For the summer Peak Load Season of the current year, the amount of EILS procured by ERCOT for the May procurement (Business Hours); and (c) For all subsequent years and Peak Load Seasons, escalate the amount of EILS from the previous Season by 10%.
$CLR_{s, i}$	MW	*Amount of Controllable Load Resource*—Amount of Controllable Load Resource that is available for Dispatch by ERCOT during the current year *i* for the Peak Load Season *s* not already included in LRRRS or LRNSRS.
$ENERGYEFF_{s, i}$	MW	*Amount of Energy Efficiency Programs Procured*—Amount of energy efficiency programs procured by Transmission and/or Distribution Service Providers (TDSPs) pursuant to P.U.C. SUBST. R. 25.181, Energy Efficiency Goal, for the peak Load Season *s* for the year *i.*
i	None	Year.
s	None	Peak Load Season (summer or winter as defined above).

8.3.2 Total Capacity Estimate

The total capacity estimate shall be determined based on the following equation:

$$\mathbf{TOTCAP_{s,i}} = \mathbf{INSTCAP_{s,i} + PUNCAP_{s,i} + WINDCAP_{s,i} + RMRCAP_{s,i} + DCTIECAP_{s,i} + SWITCHCAP_{s,i} + MOTHCAP_{s,i} + PLANNON_{s,i} + PLANWIND_{s,i} - UNSWITCH_{s,i} - RETCAP_{s,i}}$$

The above variables are defined as follows:

Variable	Unit	Definition
$INSTCAP_{s, i}$	MW	*Seasonal Net Max Sustainable Rating*—The Seasonal net max sustainable rating for the Peak Load Season *s* as reported in the approved Resource asset registration process for each operating Generation Resource for the year *i* excluding Wind-powered Generation Resources (WGRs), Resources operating under Reliability Must-Run (RMR) Agreements, and Generation Resources capable of "switching" from ERCOT Region to another power region.

Variable	Unit	Definition
$PUNCAP_{s, i}$	MW	*Private Use Network Capacity*—The Private Use Network capacities as provided to ERCOT pursuant to Protocol Section 3.10.7.3, Modeling of Private Use Networks.
$WINDCAP_{s, i}$	MW	*Effective Load Carrying Capability of WGRs*—The effective Load carrying capability of all existing WGRs as determined by ERCOT for the Peak Load Season *s* for the year *i*.
$RMRCAP_{s, i}$	MW	*Seasonal Net Max Sustainable Rating for Generation Resource providing RMR Service*—The seasonal net max sustainable rating for the peak Load Season *s* as reported in the approved Resource asset registration process for each Generation Resource providing RMR Service for the year *i* until the approved exit strategy for the RMR Resource is expected to be completed.
$DCTIECAP_{s, i}$	MW	*Seasonal Net Max Sustainable Rating for Direct Current Tie (DC Tie) Resource*—The seasonal net max sustainable rating for the peak Load Season *s* as reported in the approved Resource asset registration process for each DC Tie Resource for the year *i* multiplied by 50%.
$SWITCHCAP_{s, i}$	MW	*Seasonal Net Max Sustainable Rating for Switching Generation Resource*—The seasonal net max sustainable rating for the Peak Load Season *s* as reported in the approved Resource asset registration process for each Generation Resource for the year *i* that can electrically connect (i.e., "switch") from the ERCOT Region to another power region.
$MOTHCAP_{s, i}$	MW	*Seasonal Net Max Sustainable Rating for Mothballed Generation Resource*—The seasonal net max sustainable rating for the Peak Load Season *s* as reported in the approved Resource asset registration process for each Mothballed Generation Resource for the year *i* based on the lead time and probability information furnished by the owners of Mothballed Generation Resources pursuant to Protocol Section 3.14.1.9, Generation Resource Return to Service Updates.
$PLANNON_{s, i}$	MW	*New, non-Wind Generating Capacity*—The amount of new, non-wind generating capacity for the peak Load Season *s* and year *i* that: (a) has a Texas Commission on Environmental Quality (TCEQ)-approved air permit, and (b) has a signed Standard Generation Interconnect Agreement (SGIA), or a public, financially-binding agreement between the Resource owner and Transmission Service Provider (TSP) under which generation interconnection facilities would be constructed; or for a Municipally Owned Utility (MOU) or Electric Cooperative (EC), a public commitment letter to construct a new Resource.
$PLANWIND_{s, i}$	MW	*Effective Load Carrying Capability of New Intermittent Renewable Resource (IRR) Capacity*—The effective Load carrying capability of new IRR capacity as determined by ERCOT for the Peak Load Season *s* and year *i* that has an SGIA or other public, financially-binding agreement between the Resource owner and TSP under which generation interconnection facilities would be constructed or, for a MOU or EC, a public commitment letter to construct a new IRR.
$UNSWITCH_{s, i}$	MW	*Capacity of Unavailable Switchable Generation Resource*—The amount of capacity reported by the owners of a switchable Generation Resource that will be unavailable to ERCOT during the Peak Load Season *s* and year *i* pursuant to paragraph (2) of Protocol Section 16.5.4, Maintaining and Updating Resource Entity Information.
$RETCAP_{s, i}$	MW	*Capacity Pending Retirement*—The amount of capacity in Season *s* of year *i* that is pending retirement based on information that has been submitted on a Notification of Suspension of Operations form pursuant to Protocol Section 3.14.1.11, Budgeting Eligible Costs, but is under review by ERCOT pursuant to Protocol Section 3.14.1.2, ERCOT Evaluation, that has not otherwise been considered in any of the above defined categories.
i	None	Year.

Variable	Unit	Definition
s	None	Peak Load Season (summer or winter as defined in Section 8.1, ERCOT Planning Reserve Margin).

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Section 9: [RESERVED]

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9 [RESERVED]