

# **Georgia Transmission Corporation**

## **Capacity Benefit Margin: Explanation, Method and Reservation Procedures**

## I. Purpose

Capacity Benefit Margin (CBM) is the amount of firm import transfer capability reserved for Network Integration Transmission Service customers (Eligible Customers) taking service under the Transmission Service Tariff of Georgia Transmission Corporation (GTC Tariff) on the Integrated Transmission System (ITS) interfaces. CBM allows access to generation from neighbor systems to meet Eligible Customers' generation reserve requirements. The transmission capability reserved as CBM is intended to be used by Eligible Customers in times of emergency generation deficiencies. Preservation of CBM allows Eligible Customers to reduce their generation reserve requirements below what otherwise may have been necessary.

## II. Definitions

**Capacity Benefit Margin (CBM)**<sup>1</sup>. An amount of transmission interconnection capability reserved by an Eligible Customers to ensure access to generation interconnected systems to meet generation reliability requirements.

**Deterministic CBM.** A method to calculate CBM using a fixed target planning reserve margin as the margin of resource overload.

**Eligible Customer** A Load Serving Entity that:

- (a) executed either a Member Transmission Service Agreement or a Non-Member Transmission Service Agreement with GTC under the GTC Transmission Service Tariff and
- (b) agrees to purchase Network Integration Transmission Service in accordance with the GTC Tariff and a Member/Non-Member Transmission Service Agreement.

**Georgia System Operations Corporation (GSOC)**

**Georgia Transmission Corporation (GTC)** an Electric Membership Corporation.

**Georgia Integrated Transmission System (ITS)** the transmission network that is available for Eligible Customers.

**Load Serving Entity.** Secures energy and transmission service to serve the electrical demand and energy requirements of its end-use customers

**Network Customer Group (NCG)** Two or more Eligible Customers acting as a single party for the purposes of CBM. GTC Scheduling Groups are individually NCGs.

**Open Access Same Time Information System (OASIS)**

## III. Eligibility

CBM is available to all Eligible Customers.

Eligible Customers may combine their network loads and network resources and reserve CBM as a single entity such as an NCG.

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<sup>1</sup> Transmission Service Tariff of GTC dated April 1, 1997. Attachment C, Sheet No. ATT C-2.

#### **IV. Reservation Procedures for CBM**

GTC does not determine or advise Eligible Customers on generation reserve requirements. However, CBM is transmission import interface capability that allows Eligible Customers to meet their load serving obligations.

GTC's CBM methodology and Eligible Customer's nomination of CBM shall comply with the SERC Standards I.E.2.S1 and I.E.2.S2, System Adequacy and Security, Transfer Capability, Transfer Capability Margins as approved October 19, 2001 and as posted on SERC's web site:

<http://www.serc1.org/documents/serc%20supplements/operating/mod-004-0%20serc%20supplement%20-%20cbm%20methodology-approved%203-9-07.pdf>

##### **A. Requesting CBM from Transmission Provider**

An Eligible Customer or NCG is responsible for requesting CBM with GTC. To request CBM, the Eligible Customer or NCG shall submit to GTC the following information:

- (1) Amount, in MW, of CBM desired on each particular interface;
- (2) Description of the methodology used to determine its CBM; and
- (3) Basis for reserving CBM on the requested interface.

GTC shall attempt to accommodate each request for CBM to the extent that transmission capacity is currently available on a "first come-first served" basis. GTC reserves the right to deny CBM requests that appear unreasonable or disproportionate given the amount of native/network load service being provided to the Eligible Customer or NCG by GTC. GTC shall notify the Eligible Customer / NCG of its acceptance or denial of their CBM request within thirty (30) days of receipt. GTC shall also notify GSOC of the approved amounts, by interface. GSOC shall post the amounts, by ITS interface, on the OASIS.

##### **B. Use of CBM**

CBM shall be used only in times when:

- (1) an Eligible Customer / NCG is experiencing an emergency as a result of insufficient generation (projected resources) to serve its network load;  
AND
- (2) GTC is experiencing transmission constraints relative to imports of energy on the ITS.

In times of an emergency generation deficiency, CBM shall be used after the following steps are taken:

- a) All non-firm sales have been terminated
- b) Direct-Control Load Management has been implemented
- c) Customer interruptible demands have been interrupted.

These steps may be supplemented with more specific steps by GSOC including posting of CBM utilization in Section V below.

**C. Procedure for Using Reserved CBM during Emergencies**

The procedure to be followed in using reserved CBM as follows:

1. The Eligible Customer or NCG will make a reservation on OASIS for Network Integration Transmission Service (Type = Network; Class = Firm; Increment = Daily, Weekly, Yearly) on a specific interface / path on which it has reserved CBM.
2. The Eligible Customer or NCG will note in the OASIS reservation's comment section that the OASIS reservation is for the use of CBM capacity on the specified interface / transmission path.
3. GTC and/or GSOC will evaluate the transmission service request and CONFIRM the requested CBM transmission service on a firm basis if sufficient transmission capacity is available on the path.
  - i. A Yearly transmission service request is evaluated by GTC. When sufficient transmission capacity is available on the path, GTC will CONFIRM the Yearly transmission service request.
  - ii. Daily or Weekly transmission service requests are evaluated by GSOC. When sufficient transmission capacity is available on the path, GSOC will CONFIRM the Daily or Weekly transmission service request.

**D. Availability of Reserved CBM Capacity to Other Customers**

When CBM is not needed to maintain system reliability during periods of projected resource deficiencies, the transmission capacity reserved for CBM shall be released, thereby making it available to all eligible transmission customers on a Non-Firm basis.

**V. CBM Calculation Option:**

The formula used to calculate a Deterministic CBM is:

$CBM = (C + D) - (B - A) - E$ ; where:

- A = Eligible Customer / NCG's forecasted annual peak load; the Peak Load representing the maximum one hour coincident with GTC Members' demand; i.e., Peak Load for ITS purposes.
- B = Eligible Customer / NCG's share of generating capacity connected to the ITS as designated Network Resources.
- C = Eligible Customer / NCG's largest generating unit or share of a generating unit connected to the ITS. For example, if an Eligible Customer / NCG has sole rights to a 100 MW combustion turbine and a 70 MW share of a 700 MW coal fired generator, then C would be 100 MW.
- D = Eligible Customer / NCG's reserve obligation; for this methodology, the Non-Spin (Quick Start) portion of operating reserves as required by GSOC is the reserve obligation.

E = Eligible Customer / NCG's existing OASIS reservations used to import generation reserves (MW). An Eligible Customer / NCG's CBM request will be reduced if an Eligible Customer / NCG has a confirmed OASIS reservation to supply operating reserves from generation not connected to the ITS.

If an Eligible Customer / NCG makes an OASIS reservation to supply operating reserves, then the Eligible Customer / NCG's CBM request is reduced.

**VI. CBM Requested as of June 1, 2007:**

	2007	2008	2009	2010	2011
CBM Share on TVA Interface (MW)	<b>187</b>	<b>187</b>	<b>221</b>	<b>221</b>	<b>221</b>
CBM Share on Duke Interface (MW)	<b>87</b>	<b>87</b>	<b>104</b>	<b>104</b>	<b>104</b>
CBM Share on SCEG Interface (MW)	<b>40</b>	<b>40</b>	<b>47</b>	<b>47</b>	<b>47</b>
CBM Share on SCPSA Interface (MW)	<b>24</b>	<b>24</b>	<b>28</b>	<b>28</b>	<b>28</b>
CBM Share on Florida Interface (MW)	<b>273</b>	<b>273</b>	<b>322</b>	<b>322</b>	<b>322</b>
CBM Share on AEC Interface (MW)	<b>20</b>	<b>20</b>	<b>23</b>	<b>23</b>	<b>23</b>
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Eligible Customer's total for CBM (MW)	<b>631</b>	<b>631</b>	<b>745</b>	<b>745</b>	<b>745</b>

**VII. CBM Utilization - Posting Requirements**

Posting information can be accessed from the following link:

[https://www.oatioasis.com/GTC/GTCdocs/cbmpost2\[1\].pdf](https://www.oatioasis.com/GTC/GTCdocs/cbmpost2[1].pdf)