

PUTNAM INVESTMENTS

September 14, 2007

International Swaps and Derivatives Association, Inc.
Send to: LCDSProtocol@isda.org

Dear Sirs,

LCDS Protocol - Adherence

The purpose of this letter is to confirm our adherence to the LCDS Protocol, as published by the International Swaps and Derivatives Association, Inc. on July 24, 2007 (the "**Protocol**"). This letter constitutes an "Adherence Letter" as referred to in the Protocol.

The definitions and provisions contained in the Protocol are incorporated into this Adherence Letter, which will supplement and form part of each Covered Transaction (now or in the future) between us and each other Adhering Party, provided that the words "August 24, 2007" in Section 2(a) of the Protocol shall be deemed to be deleted and replaced with the words "September 14, 2007".

1. Specified Terms

The amendments in Section 1 and Schedule 1 of the Protocol shall apply to Covered Transactions to which we are a party.

2. Appointment as Agent and Release

We hereby appoint ISDA as our agent for the limited purposes of the Protocol and accordingly we waive, and hereby release ISDA from, any rights, claims, actions or causes of action whatsoever (whether in contract, tort or otherwise) arising out of, or in any way relating to, this Adherence Letter or our adherence to the Protocol or any actions contemplated as being required by ISDA.

3. Contact Details

Our contact details for purposes of this Adherence Letter are:

Name: Putnam Investments
Address: Legal Department, One Post Office Square, Boston, MA 02109
Telephone: (617) 760-1234
Fax: (617) 760-1625
E-mail: Stephen_Gianelli@Putnam.com



We consent to the publication of the conformed copy of this letter by ISDA and to the disclosure by ISDA of the contents of this letter.

Yours faithfully,

PUTNAM INVESTMENT MANAGEMENT,
LLC, acting on behalf of the relevant funds and
accounts listed in the relevant Master Agreement
between it and another Adhereing Party

By:

Name: Stephen M. Gianelli
Title: Vice President
Signature: /s/Stephen M. Gianelli

