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NYIS0005S Certification Letter 20090814.doc

August 14, 2009

Mr. Stephen G. Whitley President and Chief Executive Officer New York Independent System Operator, Inc. 10 Krey Blvd. Rensselaer NY 12144

Dear Mr. Whitley:

Certification of Settlement System (SS) Rules Engine Compliance

Introduction

PA Consulting Group, Inc. ("PA") has been asked by the New York Independent System Operator, Inc. ("NYISO") to confirm and certify that the NYISO's Settlement System (SS) Rules Engine software calculates settlements for Energy¹ and Ancillary Services in the Day Ahead Market and the Real Time Market administered by the NYISO, and related settlements for transmission transactions, in compliance with the relevant portions of the NYISO's tariffs and Billing Calculation (BC) documentation. These portions of tariffs and Use Cases are collectively referred to in this letter as the "Market Rules."

This certificate is similar to and builds on the previous certificates for the NYISO software dated June 12, 2007 and July 7, 2008. It certifies that the previously certified functionalities continue to comply with the Market Rules, and provides an original certification of additional Billing Calculations and of modifications to the original Billing Calculations incorporated into the May 2009 release of the SS Rules Engine.

Scope of the Evaluation and Certification

This certification represents our best determination based on our experience and expertise. It is not and cannot be in the form of an absolute guarantee. Our certification assumes that the NYISO will continue to operate its software with care, as configured, with parameters in the range of those provided to us for testing, in the manner intended, and with data that conform to the requirements of the Market Rules and fall within their range of expected values. Over time, actual results that are

¹ Capitalized terms that are not otherwise defined in this certification letter have the meaning set forth in the NYISO's tariffs.



consistently in compliance with the Market Rules will continue to confirm that the NYISO's software operates in strict accordance with those Market Rules.

This certification covers the NYISO software that calculates settlements, under the Market Services Tariff and Open Access Transmission Tariff, for Energy and Ancillary Services in the Day-Ahead Market and the Real-Time Market administered by the NYISO, and related settlements for transmission transactions. The software is referred to as the "SS Rules Engine."

Our evaluation did not cover, and this certification does not cover, the following:

- The interface software and database which calculate, read, transfer and store the data used by the SS Rules Engine;
- The Performance Tracking System (PTS) and other sources of data used by the Settlement System;
- Manual processes or procedures of the NYISO used for settlements not processed by the automated system.

Nature of the Tests Conducted

The processing of the SS Rules Engine is described in a series of Billing Calculation documents. As part of the original certification, in order to confirm that the specifications of the SS Rules Engine accurately reflected the Tariff, PA had mapped those specifications (the SS Billing Calculations) back to the relevant Tariff documents. PA updated the mapping and the list of Billing Calculation formulas to reflect the new or changed Billing Calculations.

PA then ran a series of tests in order to confirm that the calculations of the SS Rules Engine performed accurately. The tests were executed with NYISO's "Test Harness," which is the software used by NYISO and PA to facilitate testing of the SS Rules Engine. The test data employed was developed from an extract of historical settlement information. That extract was augmented as necessary to ensure that the logic of the SS Rules Engine was completely exercised. Most of the tests repeated tests conducted for the initial certification.

During our testing, we identified one result that was not in accordance with the Market Rules. It affected Billing Calculation 547. The load ratio shares for the Long Island zone were being set to zero, which would have led to undercollection of Local Black Start Credit. Since there were no Local Black Start Credits paid in the Long Island zone there were no historical occurrences of undercollection. This variance was resolved.

During the course of our testing, NYISO deployed modifications to the processing of Billing Calculations 103 and 104. Day Ahead BPCG calculation (Billing Calculation 103) was modified to change the pro-ration of Day Ahead Start Up payments In addition, Real-Time BPCG (Billing Calculation 104) was modified for generators whose RT transaction MW was greater than the BPCG basis MW. PA's certification includes those modifications.

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Certification

As a result of our examination of the Market Rules and our testing of the SS Rules Engine, we are able to provide the following certification with respect to the SS Rules Engine and its formulation:

Subject to the limitations and qualifications expressed in the "Scope of the Evaluation and Certification" section, we have determined that the NYISO SS Rules Engine, which includes all code deployed through May 12, 2009 and modifications to Billing Calculations 103 and 104 as described in this letter, performs all functions, and correctly calculates settlements for Energy and Ancillary Services in the Day-Ahead Market and the Real-Time Market administered by the NYISO, in compliance with the Market Rules in effect on May 1, 2009.

Distribution of Certification Letter to Third Parties

The NYISO intends to distribute this certification letter to its Market Participants and other persons (each a "Third Party"). PA makes no warranty of any kind regarding our certification to any Third Party. PA disclaims any liability for any damages incurred by any Third Party as a result of that Third Party's use of or reliance on our certification.

Yours truly,

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Gregg Edeson Member of PA's Management Group