FINAL DRAFT

Intra-Hour Transaction Accelerator Platform

Business Case

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Developed by:

Joint Initiative Products and Services Strike Team

Intra-Hour Transaction Accelerator Platform

Table of Contents

I. BACKGROUND 3

II. CURRENT ENVIRONMENT 3

Need for I-TAP 4

III. I-TAP PROPOSAL 4

IV. BUSINESS CASE 5

Infrastructure and Cost 5

Value 6

Benefits 6

Time Frame 6

V. NEXT STEPS 7

Intra-Hour Transaction Accelerator Platform

I. Background

In the summer of 2008, representatives from ColumbiaGrid, Northern Tier Transmission Group, and WestConnect joined forces to pursue a number of projects that would 1) benefit from a broad reach of expertise and geography, and 2) provide opportunities for extracting more efficiency and capacity out of the existing electric system. This collaboration is referred to as the "Joint Initiative".

As part of this Initiative, the Joint Initiative Products and Services Strike Team has explored a tool to facilitate and reduce the workload burden and time required to initiate and finalize within-hour and other transactions.[1] This business case contains their proposal and justification for such a product.

II. Current Environment

Currently, within-hour transactions, to the extent they occur in the Western Interconnection, are not transparent or automated.[2] There is no visibility as to resource opportunities; in most instances a market participant with a real-time need must identify a willing and acceptable seller by making a series of telephone calls. After locating a willing seller, the deal must be put together, and the parties must determine whether there is available transmission and whether that transmission can be scheduled in the required timeframe. Because there may not be sufficient time to identify and finalize transactions, opportunities may be lost.

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[1] The use of I-TAP is not limited to within-hour transactions; however, as this is where it is anticipated to bring the greatest value, these types of transactions are the focus of the business case.

[2] Opportunities for within-hour transactions are also constrained by the lack of a within-hour delivery mechanism. As a general proposition, until very recently, within-hour transmission schedules were only permitted to address Balancing Authority "Emergencies". In 2008, NV Energy adopted a business practice providing for within-hour transmission schedules for any purpose. In February, 2009, the Joint Initiative Products and Services Strike Team recommended that Transmission Service Providers in the Western Interconnection, to the extent that they can do so within their scheduling infrastructure and without negatively impacting reliability, offer within-hour transmission scheduling. Following from that recommendation, PacifiCorp, Puget Sound Energy, and Avista have posted draft within-hour transmission business practices. Bonneville Power Administration has announced a pilot project through which they will accept new schedules on the half hour for increases in wind generation. WestConnect Transmission Service Providers and other Transmission Service Providers have indicated they are moving forward with such practices. It should be noted, however, that the Products and Services Strike Team recommended practices with a "fill-in-the-blank" approach to accommodate the individuality of each Transmission Service Provider's system, and business practices will vary from provider to provider.

Need for I-TAP

Market Participants need to be able to identify and enter into real-time transactions faster and more easily than they can today in order to:

1. Better use the existing system by optimizing existing capacity;

2. Manage the integration (and integration cost) of variable renewable generation (in particular, tools are needed to address significant unexpected ramps in generation within an operating hour);

3. Meet reliability standards, including recovering from an ultimate contingency event within the prescribed timeframe when there are not sufficient reserves avoiding expensive sanctions;

4. Mitigate the need for imbalance energy and minimize imbalance energy charges; and

5. Fully use other Joint Initiative Products (Dynamic Scheduling System and Within-Hour Transmission Purchase and Scheduling Business Practices).

III. I-TAP Proposal

In simple terms, I-TAP will be an internet accessible bulletin board 'hub', or meeting place, that links existing systems (e.g. OASIS, e-tag author, e-tag approval, deal-capture, trading platforms, etc.) as spokes, via the new I-TAP hub software and hardware, to enable high-speed real-time transactions via a single port of entry. While individual market participants may already have trading systems with many of the I-TAP features (except for the power products bulletin board), the I-TAP system will provide an enhanced level of transaction speed and efficiency while providing a unique and broad view of power products available throughout the Western Interconnection.

While I-TAP will coordinate and cooperate with existing systems by linking them together via the I-TAP hub and providing a new electronic bulletin board for the posting of power products available throughout the Western Interconnection, I-TAP is not intended to be a centralized market. All participation would be voluntary, and all transactions would be bi-lateral deals between the individual parties.

I-TAP will be administered/operated by a "Host."[3] The Host will physically maintain the software, hardware, and telecommunications links within a secure facility. The Host will also administer the software, with respect to updates, upgrades, maintenance, backup, and security.

[3] The Products and Services Strike Team has discussed the need for the Host to be sufficiently independent from market participants. Possible hosts discussed by the group have included the software vendor or other entities such as ColumbiaGrid.

It will manage the contract with software vendor and, depending upon the final payment arrangement with the software vendor, might also act as a payment agent for I-Tap users. It will act as the moderator amongst the I-TAP parties. Additional roles for the Host will be discussed and determined through the RFP process (including maintaining the enabling bilateral agreements amongst I-TAP users), and may evolve as I-TAP is implemented.

IV. Business Case

Infrastructure and Cost

The Products and Services Strike Team issued an I-TAP "Request for Information" in April, 2009. Multiple responses were received. The RFI responses confirmed that I-TAP is technically feasible, and can be accomplished either through the development of a new software platform or the integration and modification of existing vendor products. The estimated costs of I-TAP ranged significantly between the proposals, and were dependent upon whether the ultimate vendor recovered its costs through an up-front payment or through transaction fees. Categories of cost included software, hardware, and maintenance. Further discussion with potential vendors in a Request for Proposal process is required.

I-TAP will facilitate a needed market. In order to succeed, among other things, any market must have the following elements:

1. Ease of trading and low cost of trading;

2. Diverse group of buyers and sellers to produce liquidity and volatility; and

3. Price transparency and price discovery.

The ITAP platform, while not being directly responsible for ensuring these elements, will support them by having the following attributes. ITAP will allow users to easily:

1. Broadcast the availability and price of capacity and energy for both economic purposes and to address unexpected changes in loads or resources;

2. Identify the products they are looking to buy or sell, both the quantity and the quality;

3. View bids and offers, both quantity and price;

4. Post bids and offers with a minimum of keystrokes;

5. Ascertain the availability of transmission; and

6. Make the tagging process easier.

Value

As a value proposition, I-TAP's facilitation of within-hour transactions will likely (1) lower the cost of integrating variable generation, (2) help meet reliability standards and avoid expensive sanctions, and (3) lower the need for imbalance energy and associated charges.

Benefits

The following summarizes additional anticipated benefits of the I-TAP:

1. More efficient use of existing system resources;
2. Visibility of capacity and energy needs and availability of resources to meet those needs;
3. Greater ability to take advantage of load and resource diversity;
4. Provides access to more economical resources for balancing services;
5. Greater opportunity to use evolving within-hour transmission purchase and scheduling opportunities;
6. Possible lower portfolio costs as LSEs will naturally migrate to the lowest cost commodity available with increased market opportunities;
7. Permits more efficient dispatch of units;
8. Less reliance on Balancing Authority to provide energy for imbalance;
9. Scheduling efficiencies that maintain and enhance reliability based upon system conditions (cuts only done if necessary);
10. With respect to events which are non-DCS events but use reserves to respond, facilitates a market to respond in order to avoid ultimate contingency event;
11. Realization of some of the benefits of an RTO or centralized market without the structure and overhead of an RTO;
12. Provides information as to how market participants use the system and opportunities, informing NERC discussion (white paper) on the need for 10-minute markets;
13. Allows the market to determine the value of capacity; and
14. Facilitates the development of variable resources.

Time Frame

It is anticipated that the I-TAP development will take approximately six to eighteen months from the vendor contract signature.

V. Next Steps

Solicit broad stakeholder interest and assess sufficient regional interest and financial commitment to proceed with a Request for Proposal. Assuming sufficient interest to proceed, the Products and Services Strike Team anticipates finalizing the Request for Proposal by September 30, 2009, and assuming there is an acceptable response, the Participant Agreements and I-TAP contract award by early January, 2010.