Appendix F – Solution Definition Details
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Solution Definition Details

Project: Customer Information System
SOFTWARE, VENDOR, AND SOLUTION INTEGRATOR DESCRIPTION

SAP is one of the world’s leading application software providers, employing approximately 22,000 people in more than 50 countries. Founded in 1976, its products now support over 700 utilities worldwide. The SAP Utilities Solution now bills over 20 million contracts globally with license commitments that will grow this number to just under 130 million. The SAP Utilities Solution, developed from its inception to be packaged software, brings BC Hydro advantages in terms of durability, continual investment and performance.

The SAP Utilities Solution is:

- Configurable to provide the necessary business process flexibility
- Offered in upgradeable releases
- Supported by SAP with multiple layers of on-call resources
- Innovative and continuously improving because of SAP’s considerable emphasis on R&D
- In 1999 SAP invested more than C$ 1 Billion in research and product development. Each utility using the SAP Utilities Solution has a voice in future developments through user group participation. BC Hydro will benefit from the requests made by all Customer Care and Service (CCS) clients in addition to driving our specific enhancement preferences.

SAP has made a strong commitment to the global utility industry and has actively provided industry specific solutions for utilities since the late 1980’s. The SAP vision for the Utility Industry is to support the international utility industry with best-in-class solutions designed to provide the competitive advantages required to succeed in today’s challenging market environment. Utilities have to be nimble to respond to a rapidly changing market and require flexible solutions that support evolving business needs. SAP has met the challenges of a changing industry through the development of SAP’s Utilities Solution.

Specifically the CCS solution has a strong track record with the references checked: GPU and New Brunswick Power. Both of these utilities are currently in the process of upgrading to a new software release.

For SAP CCS implementations, our references gave a very positive endorsement of SAP. More specifically, SAP was rated very highly in the following areas:

- Software Configurability/Flexibility
- Software Scalability
- Software Functionality
- SAP Responsiveness/Problem Resolution

For functionality and configurability we conducted very in-depth and intensive seven-day workshops/labs with a cross-SBU team representing all CIS functionality.
In terms of the client base that SAP serves, we found a close fit with the scale and composition of BC Hydro (1.6M electric customers). We found that SAP met requirements of this size/scope better than other CIS respondents did. For example some ASPs or other vendors have less experience with this size and scope. More specifically the reference sites of GPU (2M+ customers) and Energy Australia (1.2M customers) matched the critical scale requirements of BC Hydro. Additionally, SAP has the strongest user group of the CIS vendors who responded to our RFP. The user community meets once each year to prioritize the list of enhancements. The enhancements are requested by the industry and SAP then focuses their efforts around priorities developed by user community.

At the time of response to the proposal, SAP indicated the following facts:

- 580 installations worldwide, serving over 700 Utilities
- 102 Utility installations in North America
- 150 Utilities companies using the current SAP Utility Solution
- North American customers productive with the SAP Utilities Customer Care and Service solution include:
  - NB Power (New Brunswick)
  - Canadian Niagara Power (Ontario)
  - Sacramento Municipal Utility District (California)
  - GPU, Inc. (Pennsylvania)
  - OGE Energy Corp. (Oklahoma)
  - Reliant Energy Inc. (Texas)
  - Imperial Irrigation District (California)
  - Metropolitan District Commission of Hartford (Connecticut)

In terms of the combined Accenture (solution integrator) and SAP (vendor) team selected there are a number of factors about this alliance that are important to BC Hydro.

- The combination of Accenture and SAP have been involved in 22 CCS projects since 1998 with 10 major implementations that are live in production
- There has been joint Accenture/SAP product development at SAP’s head office in Walldorf, Germany. Current areas of focus are CRM, Meter Data Management, and Deregulation.
- Accenture is a preferred implementation partner for R/3 and CCS solutions
- Accenture and SAP form local alliances ensuring strong delivery expertise

Three proposals to provide solution integrator services of the SAP product were reviewed. Accenture was selected for the following reasons:

- Accenture provided an overall lower cost solution than the second place finalist (Omnilogic/PWC)
- Accenture provided the most recent implementation experience with the CCS solution including, the successful implementation of CCS in a very similar utility to BC Hydro (Energy Australia, Crown Corporation, electric only implementation, 1.3 M customers)
Accenture provided a stronger and more experienced implementation team

**FUNCTIONALITY DESCRIPTION**

The SAP Utilities Solution provides mission-critical functionality to support customer facing and back office activities. A later section in this business case more specifically outlines the scope of the first phase. A number of the following capabilities will be mission critical to BC Hydro as we continue to develop our customer service capability.

- **Customer Interaction and Care** – provides a powerful and flexible workplace for the Customer Service Representative, incorporating a search engine, contact management, and integration to inbound/outbound CTI/IVR technology.

- **Revenue Management** – supports activities related to financial dealings with customers. This includes recording revenue and receivables, administering creditworthiness, managing security deposits, processing payments, dunning activities, and write-off of bad debts.

- **Billing and Invoicing** – provides key advantages in the area of billing and invoicing. It supports flexible business rule-based usage calculations, rates and pricing, as well as a variety of charge calculations. All types of utility services are supported (with some set-up and configuration). In addition, rate structures ranging from bundled through unbundled to multi-company, and non-energy goods and services can be accommodated.

- **Device Management** – supports requirements related to the acquisition and life-cycle management of measuring related equipment. Device Management supports meter reading, meter installation and inspection/certifications of the meters.

- **Service Order Management** – covers scenarios to initiate, manage and complete customer-facing fieldwork.

- **Workflow Routing** – at sign on users are presented with a specific list of scenarios (comprised of processes and workflows configured to accomplish specific business events) based on their role(s) within the organization.

- **Operational CRM** – business processes include many of the traditional high-volume batch activities (e.g. meter reading upload and download, bill calculation, invoicing, payment lot processing, etc.)

- **Business-to-Consumer Internet Self-Service** – the solution supports self-enrolment, changing personal data, viewing account and consumption information, move-in, move-out, meter reading entry, invoice presentment, and electronic bill payment.

- **Energy Data Management** – acts as a repository for the utility to store interval-based metering and load profiling data.

- **Automated Communication Protocols for the Deregulated Market** – provides an inter-company data exchange, which acts as a communication engine between service providers working in a deregulated environment.
FUNCTIONAL FIT DESCRIPTION

The solution selected provides us with customer care functionality that is both deep and broad. The SAP Utilities Customer Care and Service System (CCS Release 4.63) is a product that is proven in the industry, providing full functionality and built using up-to-date technology.

Our Request for Proposal phase received twenty responses with a good mix of very strong proposals covering various scenarios: In-house product implementation, out-source/application service provider, and partnership proposals. A short list of potential solutions was developed, followed by extensive reviews of products against our functional, technical, and vendor requirements.

An extensive list of functional requirements was used in the evaluation of products. Vendor product features were verified against the functional checklist. The SAP product scored a total fit of 94%; the highest fit percentage of reviewed products (see Appendix G for the final evaluation summary). For each of the major areas, the functional fit of the SAP product to BC Hydro requirements was as follows:

- Account Management: 98%
- Billing: 98%
- Credit & Collections: 96%
- Customer Choice: 92%
- Customer Management: 98%
- Customer Service: 86%
- Financials: 90%
- Inventory (e.g. meters): 99%
- Portfolio Management: 95%
- Rates Management: 93%
- Service Address: 92%
- Service Orders: 93%
- System Mechanics: 91%
- Usage Management: 97%

It was clear that the SAP product emerged as the winner in terms of match with our requirements.

TECHNOLOGY DESCRIPTION

The following principles guided the selection of technology:

- Provide a cost effective computing environment that meets known business and performance requirements, yet is scaleable to support growth in customers, products and services
- Ensure proven robustness and suitability of the platform chosen
- Comply with our corporate IT standards

The technical platform that SAP is built on fits our GTA (Goal Technology Architecture) and received the highest rating in our evaluation of technology when compared to other respondents.

SAP's track record in the technology arena is very good. Currently their systems have moved away from proprietary to open systems technology and they have implemented a constant upgrade path to newer technical platforms. SAP's product upgrade strategy includes a new release of the product delivered on
the average of once every twelve months. On average, CIS installations upgrade to the next release of the CCS software once every twenty-four months. Minor enhancements are released automatically every quarter and companies are free to apply or make use of them as needed.

The SAP product is built on a proven three-tier client/server architecture comprised of 1) a presentation layer, 2) an application/business logic layer, and 3) a database layer. To ensure our solution will have the best possible fit with our existing technology and future technical directions, the configuration will be fully compliant with our IT standards.

Three distinct architectures will be developed and rolled out at appropriate stages of the project:

- A development architecture will provide the infrastructure, tools, standards and procedures required to configure and test the solution and convert historic data
- Execution architecture will provide hardware, operating softare, maintenance, and training environments necessary to support production services.
- An operations architecture will provide application support tools, skills, procedures and service management tools to ensure the required degree of service availability and responsiveness

The new CIS will be established on a UNIX/RDBMS platform. This approach will provide multiple benefits to BC Hydro, including:

- Flexibility and scalability of the distributed architecture
- Easy integration with Internet service elements
- Fit with our corporate IT direction moving to a fully distributed computing environment
- Support the corporate direction to move away from the BC Hydro mainframe