Appendix I – Summary of Risks and Risk Mitigation
<table>
<thead>
<tr>
<th>Risk</th>
<th>Mitigation</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Resources:</strong></td>
<td></td>
</tr>
<tr>
<td>• The project will demand very significant participation from the SBUs (especially Customer Services), Westech, the solution integrator and the software vendor. This is of some concern, as three other projects (Joint Meter Reading, MRMS and BC Gas Conversion) will be occurring during the CIS implementation.</td>
<td>• Westech is keenly aware of the requirements and have committed to meet resource requirements and time lines. They are in the process of hiring the necessary resources.</td>
</tr>
<tr>
<td>• SBU resources and especially subject matter experts are completely committed on present initiatives.</td>
<td>• SBU projects are being prioritized to free up experts to work on the project. Additionally, the project budget provides for back-filling many of these resources (see assumptions).</td>
</tr>
<tr>
<td>• Solution Integrator and Software Vendor resources are often inexperienced.</td>
<td>• Key vendor and solution integrator candidates will be interviewed at the discretion of BC Hydro</td>
</tr>
<tr>
<td>• It can be difficult to ensure quality when business decisions are delayed</td>
<td>• The selection of people who have the appropriate expertise and ensuring that they are empowered to make business decisions</td>
</tr>
<tr>
<td><strong>Interfaces:</strong></td>
<td></td>
</tr>
<tr>
<td>• Some interfaces may be complex and support for the interfacing system may be less than optimal. For example, the mobile dispatch system (MDS) is rather complex and becomes more so due to the fact that it is being re-defined.</td>
<td>• Westtech currently supports interfacing systems. Westech will be involved in writing the interfaces and they have extensive experience building interfaces to the existing CIS. Westech is an integral part of the CIS project plan and will have about 25 people on the project.</td>
</tr>
<tr>
<td>• Changes in the new CIS may affect a significant change in programming logic and business processes in the interfacing systems.</td>
<td>• The BluePrinting will investigate all possible changes and develop a migration and implementation plan.</td>
</tr>
<tr>
<td><strong>Change Management:</strong></td>
<td></td>
</tr>
<tr>
<td>• New CIS system will necessarily change many business processes and provide a completely new user interface. Many employees working with the CIS may have difficulty adapting.</td>
<td>• The project plan recognizes this significant risk and has allocated 17% of the budget on Change Management.</td>
</tr>
<tr>
<td>• Significant changes always affect employee morale.</td>
<td>• The CIS project will have a team with a defined budget and plan to proactively manage the change. Strong sponsorship and front line management support will ensure the success</td>
</tr>
<tr>
<td>• Some long-term employees are not very PC literate and new CIS user-interfaces demand significant PC skills.</td>
<td>• It will be a pre-requisite for the user community to have mid-range PC skills.</td>
</tr>
<tr>
<td><strong>Data:</strong></td>
<td></td>
</tr>
<tr>
<td>Risk</td>
<td>Mitigation</td>
</tr>
<tr>
<td>------</td>
<td>------------</td>
</tr>
<tr>
<td><strong>Most CIS implementations have to work with decades old data in the legacy system. Often the data is inconsistent (some fields are missing or used for multiple purposes), which can adversely impact the data conversion effort.</strong></td>
<td><strong>Confirm and Approve assessed the quality of the data and allowed for data related issues in the project plan. Some data will have to be cleansed and converted programmatically using data cleansing and conversion tools provided by the vendors, and elements requiring manual intervention will be converted by Customer Services employees starting immediately after the BluePrinting phase.</strong></td>
</tr>
</tbody>
</table>

**Scope Control:**
- Given the length of the project, there is the potential for scope changes to arise.

**Time Line:**
- The project plan shows a time line of 19 months for the blue print, build and implementation, and another 3 months for post go live support. In this time business priorities can change, customer expectations can shift and employee and project team member enthusiasm and support can diminish.

**New System:**
- The new system introduces new software and operating procedures in BC Hydro. The skills required to operate the new system are different from those currently required.
- CIS systems create significant data growth, which can pose a risk for system integrity and response.

**Project Management:**
- Sponsorship is detached and employees do not pay attention.
- Capacity for Business Change – there are two other major projects running.

**Mitigation:**
- Implement a thorough change request process; any potential changes to scope will be brought forward, documented and put through a decision-making process to determine its necessity and source of funding.
- Soft and hard cut-off dates for the change request process will ensure that scope changes will take place only within an agreed-upon framework.

**Mitigation:**
- The project timeline has been compressed to a “most realistic” time frame. Given the all-consuming nature of the CIS implementation on the business units, the business priorities will be focused on CIS, and the project has the full support of the Customer Services management team.
- Customer expectations are not expected to shift significantly in this time frame.

**Mitigation:**
- All technology introduced by the new system fits the Corporate GTA guidelines.
- Resources needed to implement the system are being confirmed. BC Hydro will be provided with the necessary training as well as knowledge and skill transfer on the job. This will be critical given the learning curve that will be associated with the new SAP CCS system.
- Data volume will be spread across the appropriate number of disc units to ensure response and mirror all production data to ensure integrity. A later project should be undertaken to develop data archiving.

**Mitigation:**
- Sponsorship forms a key piece of the Change Management strategy.
- CIS will be phased in to mitigate this risk;
<table>
<thead>
<tr>
<th>Risk</th>
<th>Mitigation</th>
</tr>
</thead>
<tbody>
<tr>
<td>concurrently (MRMS and BC Gas Conversion), which increases the amount of change the business must absorb in a given time and may cause inefficiencies for the implementation of CIS or delay CIS roll-out which means increased cost, the longer the delay</td>
<td>also replacing only core functionality.</td>
</tr>
<tr>
<td>• The budget may be at risk if project scope is not controlled or well-defined</td>
<td>• Confirm and Approve conducted a significant analysis to explicitly define scope; project budget and therefore timeline and resources are developed based on this definition.</td>
</tr>
<tr>
<td>• Vendor project management may not be experienced posing undue risks.</td>
<td>• There will be a project management office with experienced representation from BC Hydro, Westech, the Solution Integrator and the Vendor.</td>
</tr>
<tr>
<td></td>
<td>• Vendor candidates have been interviewed and the relevant candidates have been specified in the contract.</td>
</tr>
<tr>
<td></td>
<td>• The Project will adhere to established project management methodology, and will report to Project Directors and the executive Steering Committee.</td>
</tr>
</tbody>
</table>

Conversion:

• There will be a very short period of time in which neither CIS nor SAP CIS will be available to users during the conversion process. This “downtime” could adversely affect customer service and billing operations.

• There is a risk that data may not be converted accurately and on a timely basis. Billing and other data related errors could occur post-implementation with an adverse impact on the business.

• The “downtime” will be minimized by planning Go Live over Easter 2003 and ensuring that high volume and high impact business processes are either completed in advance or delayed as appropriate.

• Very detailed cutover planning (to the hour each day) will mitigate this risk.

• The conversion process will be performed for the entire customer base. Several mock conversions will be done to verify all aspects of conversion before going live with the new system. A separate data verification effort will review converted data for accuracy and completeness.

Post Go Live Support:

• Service levels in call centres and billing operations will be impacted immediately after go-live because the system will be new to all users, even though all users will have been trained.

• A system of expert users and power users will be in place at go live to support all online users. This intensive system of support will be in place for the first two weeks after go-live with the goal of restoring regular support levels over a period of two to three months. Additionally, all users will be trained for their respective jobs, and additional training will be available as refresher courses immediately before and after go-live.