Virtualization Infrastructure Redundancy

Problem:

After reviewing our present virtualization strategy, I have determined that our sole virtualization setup in our Frederick office is not enough to cover the needs of the growing mobile workforce in the company.

If for example our internet or power is lost in the Frederick office, our remote or office workers in either location will not be able to access files, Deltek Vision, employee portal, or email. This is becoming a consistent concern with the storms we have been receiving in the region, as well as other elements out of our control.

The Baltimore office currently has no server onsite, all IT needs, including wireless authentication requests are sent to Frederick.

Solution:

I reviewed different solutions, such as increasing the uptime of our Frederick office, by having a standby generator and a secondary internet connection. Also looking into moving as many services we currently hold on premise onto the cloud. As well as the option to setup a secondary virtualization solution in our Baltimore office for redundancy.

After reviewing preliminary costs of all options with management, it was decided to review the option of having a secondary virtualization solution in our Baltimore office.

This would include purchasing additional servers as virtualization hosts and for the storage backend. Also including an additional battery backup in the event of power failure.

This will enable us to have a high availability solution to our IT services so that our employees can access the resources they require, particularly while in the field. Email has become a vital point of communication, both internally and to our clients. Our employees have become reliant on accessing vital forms and drawings from the employee portal to have information pertaining to the jobsite they are on. Our reliance on Active Directory for logins and for wireless authentication has also made this a priority.

I expect this project to take about two days in the Baltimore office to implement once items are received.

Cost:

Servers	$14851
Battery Backup	$1250
Windows Datacenter and CALs)	$14500
VMware license	$4409
Total	$35010