

Exhibit 4.1 – Qualifications

- Bachelor of Science, Business Management Degree, Westminster College
- Extensive **BELLCORE TECHNICAL AND MARKETING** training in the telecommunications industry.
- **NARTE Certified Engineer** (National Association of Radio and Telecommunications Engineering).
- Over **20 years experience** in the telecommunication industry. Extensive background in facility and switch planning, designing SONET/digital transmission systems for interoffice facilities and redundant routes, developing and analyzing long range incremental cost studies, facilitating and developing local loop integrated planning.
- Over **10 years experience** analyzing and reviewing filings by the telecommunications industry. Conduct operation evaluations, regulated rate base analysis, cost and rate studies, competitive entry and related issues, Extended Area Service (EAS) application analysis and development and analysis of Total Element Long Range Incremental Cost (TELRIC) models and studies, and review and provide recommendations to the Public Service Commission on USF support applications.
- Instrumental in the development and direction of fiber based Broadband strategies, and the establishment of survivability and diversity for the US West switch and facility network.
- Participated on the Regional Task Force assigned to design strategies for the deployment of new technologies in the US West Networks across the region.
- Interactively participated with vendors, community, state and business groups to design and develop communication systems and develop the expansion of the public network.
- Monitored and initiated modernization strategies for US West's interoffice facility and switch network for Utah. Provided Company direction for orderly economic network evolution; includes making recommendations to high level managers.
- Initiated strategic business case development and economic analysis for US West business customers, Rural Independent Companies and Interexchange Carriers.
- Translated customer needs to technical requirements and analyzed future emerging technologies and network elements.

- Analyzed and determined appropriate telecommunications systems for business customers in conjunction with operational problems of current telecommunication systems.
- Prepared, and tracked capital and expense operating budget for facility and switch projects through approval, co-ordination and completion of the project.