UNIT 1

Generator
- Supplier — TES located in the Czech Republic
- Capacity — 8,032 kW, 10,770 hp
- Weight — 101,200 pounds

Turbine
- Supplier — Andritz Hydro located in Montreal, Canada
  - Runner fabricated in France
  - Draft tube fabricated in Portugal
  - Bearings fabricated in Germany
- Turbine Max Flow Rate — 300 ft³/sec (134,600 gpm)
- Max Head — 328 feet or 142 psi
- Turbine Diameter — 49 inches
- Turbine Weight — 48,000 pounds
- Supply Pipe Diameter — 72 inches
UNIT 2

Generator
- Supplier — TES located in the Czech Republic
- Capacity — 3,304 kW, 4,430 hp
- Weight — 20,800 pounds

Turbine
- Supplier — Andritz Hydro located in Montreal, Canada
  - Runner fabricated in France
  - Draft tube fabricated in Portugal
  - Bearings fabricated in Germany
- Turbine Max Flow Rate — 120 ft$^3$/sec (53,800 gpm)
- Max Head — 338 feet or 146 psi
- Turbine Diameter — 29 inches
- Turbine Weight — 46,200 pounds
- Supply Pipe Diameter — 48 inches
POWERHOUSE

New Powerhouse
• Extensive architectural effects were incorporated into the building to be compatible with the historic nature of the site
• Building construction is reinforced concrete with a brick fascia
• Building Dimensions:
  164 feet long x 50 feet wide x 46 feet tall
• Distance from turbine sump floor to peak of roof is over 83 feet
• The overhead bridge crane can lift 120,000 pounds

Historic Powerhouse
• Constructed in 1904
• Building construction is unreinforced masonry
• Existing artifacts and equipment will be preserved and building modified to be a limited access museum
WATER SUPPLY AND PENSTOCK

Water Supply
- Power generation from ‘run of the river’ flow
  - Power is produced only when water demands from downstream users require water deliveries
- Water is diverted from the Provo River at the Olmsted Diversion into the Olmsted Flowline and eventually into a 10 million gallon storage reservoir
- Water for the power plant flows from the 10 million gallon reservoir through an 84-inch steel pipeline

Penstock
- 84-inch diameter steel pipe
- Maximum flow to the power plant is 429 ft³/sec (192,500 gpm)
- Water from the power plant is returned to the Provo River through the historic tailrace
MICRO HYDRO UNITS

**Unit 3**
- Supplied by Canyon Hydro of Washington State
- Max Flow Rate — 11.9 ft³/sec (5,340 gpm)
- Generator Capacity — 272 kW; 360 hp
- Maximum Head — 340 feet (147 psi)
- Turbine Speed — 1820 rpm

**Unit 4**
- Supplied by Canyon Hydro of Washington State
- Max Flow Rate — 7.5 ft³/sec (3,360 gpm)
- Generator Capacity — 160 kW; 215 hp
- Maximum Head — 340 feet (147 psi)
- Turbine Speed — 1830 rpm
POWER TRANSMISSION

All energy generated is owned and sold by the Federal Government through the Western Area Power Administration

The energy has been allocated to:
- Central Utah Water Conservancy District
- Utah Municipal Power Agency
- Utah Associated Municipal Power Systems
- Weber Basin Water Conservancy District
- Lehi City
- Springville City
- Kaysville City

- The power produced is transmitted to the Provo Power System and distributed through the Rocky Mountain Power Hale Substation