Engineering Services Agreement (ESA) Information Form

Contact Power Department for Fee Amount

All fields are required and must be filled in with your best available information.

(only location/load/signature sections are required if you are updating the load forecast for and existing ESA)

Does This Request Amend an Existing ESA? ☐ **Yes** ☐ **No**

Lehi Power Customer Contact:

Requested Date for Start of New Load Service (MM/DD/YY):

Customer Information

Authorized Customer Contact:

Preferred email (required):

(email will be used for ESA invoices and other project correspondence)

Phone #:

Company/Legal Entity Name:

Company/ Legal Entity Type (Corp., LLC, etc.):

State Where Company/ Legal Entity is Incorporated:

Company Billing/ Mailing Address:

City:

State, Zip:

If you have an existing account with Lehi Power provide the account number below

Account Number:

Tax ID #:

Will this account be exempt from state taxes for electricity purchases?

☐ No ☐ Yes, we will provide exemption certificate

New Service Information

Please Specify Study Voltage(s):

Tell us what delivery voltages you want us to study. Ex: Distribution delivery (typically 120/208V, 120/240V, 277/480V secondary or 12.5kV/25kV Primary etc.),

New Load Service Delivery Point(s) or Increase at Existing Delivery Point?

Delivery Point Location(s):

Provide at least **one** of the following for each site requesting service **GPS Coordinates or Township/Range or Physical address.**

Please attach any maps or other supporting documentation that would help identify the location(s)

Load Information

Load Forecast in MW or kW:

Provide Estimated Peak Diversified Load (not total connected)

(If more than one delivery point, include a forecast for each location)

	2025	2026	2027	2028	2029	2030	2031	2032
Existing [1]								
New								
Total								

1-Maximum of existing actual peak demand or contract peak demand

*Lehi Power will not hold or guarantee capacity more than 2 years from when electric facilities are available

Briefly describe the Type of Facility, Nature of Load Required, and Anticipated Hours of Operation:

(Example: Chemical processing plan with various motors and high tech equipment. Anticipated to operate 24 hours a day, 7 days a week, 365 days a year)

Largest Anticipated Motor Size in Horsepower:

Expected Overall Power Factor:

*Rate schedules add a PF penalty for anything under 9 or 99% lagging

Describe any Sensitivity of the New Load to Normal System Voltage Changes or Disturbances:

Describe 1) Sq. footage of building if applicable 2) If similar facility existes with utility meter data 3) Any backup generation planned for this facility:

Customer Signature _____ **Date** _____

Print Customer Name_____ **Date** _____

Internal Use Only:

Fee Amount _____ (determined by Lehi Power Department)

☐ Paid on: _____

EST 1852
LEHI CITY
POWER DEPARTMENT

POWER QUATLITY AND RELIABILITY QUESTIONAIRE

Facility Needs

The following questions address the reality that events (such as lighting, vehicle accidents, etc.) will happen to disturb the normal flow of power to the facility resulting in voltage sages and spikes and/or interruptions. The best time to address these issues is at the planning/design stage. An electrical supply system designed to provide higher-than-normal levels of reliability and quality will likely cost more. This added cost is borne by Customer and will not prevent all disturbances from occurring. Customers are encouraged to design their end use to be more resilient to disturbances and usually the cost to do this is less expensive than if the utility designs this resiliency into the electric supply systems.

Availability of Facility: _____

(How many minutes of interrupted power can the facility withstand per year? How long can an interruption last before unacceptable consequences are experienced by the facility?)

Sensitivity to Steady-state Voltage Variations:_____

(Describe how tight the voltage range needs to be for successful operation of this facility. Typical is +/-5%)

Sensitivity to Voltage Disturbances:_____

(The most common disturbance is voltage sag due to unavoidable and temporary short circuits on nearby lines. These are usually very short but can sometimes last up to a few seconds. Describe your facility's sensitivity to these events.)

Sensitivity to Voltage Distortion or Other Abnormalities: _____

(Occasionally a facility requires extremely pure power. Please describe any other needs in this regard.)

Electrical Pollution

It is now quite common for facilities to have equipment that can pollute the power if not properly specified or controlled. This includes variable frequency drives (VFDs), large motors without proper starters, induction heaters, and highly fluctuating loads such as welders and other arc producing devices. The company as standards governing the pollution such equipment might introduce into its power system so that other customers are not adversely impacted. The following questions address these issues. Please state both size and type.

Highly Fluctuating Load:_____

(Describe any large (>10kVA or 10 hp) equipment that will suddenly change from one load level to another. This includes motors- both starting and running loads, welders, arc-producers, X-ray machines, woodchippers, etc. If any of these large loads will be changing more often than once per day, state how often it will change.)

Harmonics-producing Load: _____

(Describe any large (>10kVA or 10hp) equipment that will produce harmonic distortion. This includes VFDs and rectifiers; also include aggregate loads such as percent of facility load that consists of VFDs if more than 10%.)

Other Unusual Load or Equipment: _____

(Sometimes equipment works in ways that we don't expect. For example, induction heaters are very different from resistance heaters in that they can cause "notches" or pulsing in the supplied voltage. Any such equipment should be listed here. Also include any special mitigating equipment that will be installed such as a Static VAr Compensator—SVC.)

Power Factor (PF) Correction and Filters: _____

(Sometimes PF correction capacitors are added to a facility with VFDs or other harmonic load. This often leads to failed capacitors and other problems. Please state the size of PF correction capacitors and location if more than 150 kVAr.)