

List of contents of the estimation of the Power Distribution for the ILC 9-19-06

WBS

1.7.2 **ELECTRICAL**

1.7.2.1 Engineering, study work and documentation

1.7.2.1.1 In-house Engineering

1.7.2.1.2 Outsourced Consultancy Services

1.7.2.2 High Voltage Equipment, Power Distribution

1.7.2.2.1 Main Substation 400kV system, 36 kV system, protection, auxiliaries,

cabling work, installation work

1.7.2.2.2 Distribution Substations

e- source
 36 kV system, protection, auxiliaries, installation

e+ source work

e- damping ring

e+ damping ring

RTML

Main Linac

BDS

Experiments

1.7.2.2.3 Medium Voltage Distribution & Transformers

e- source
 36 kV cables downstream of substations,

e+ source power lines, ring main units,
 e- damping ring transformers, protection, cables,

e+ damping ring installation work.

RTML

Main Linac

BDS

Experiments

1.7.2.2.4 H.V. cable links from central area

36 kV cables and installation work

1.7.2.3 Low Voltage Equipment, Power Distribution, Lighting

1.7.2.3.1 Surface buildings Costs included in civil eng. Estimates: Buildings complete

1.7.2.3.2 Shafts and shaft base caverns

e- source
e+ source
du V system for conventional loads and machine loads, lighting,

e- damping ring socket outlets,

e+ damping ring

RTML

Main Linac

BDS

Experiments

1.7.2.3.3 Tunnel

e- source
 e+ source
 loads and machine loads,

• e- damping ring power lines, lighting, rack supplies,

e+ damping ring

- RTML
- Main Linac
- BDS

socket outlets

as placeholder.

1.7.2.4 Emergency Power Sources

• e- source

- e+ source
- e- damping ring
- e+ damping ring
- RTML
- Main Linac
- BDS
- Experiments

1.7.2.5 Power network monitoring 1.7.2.6 Power network monitoring

For the time being only a volume of money set aside as placeholder.

For the time being only a volume of money set aside

1.7.2.7 Communication equipment

Not included in the estimate

1.7.2.7.1 Telephone equipment

1.7.2.7.2 Public address and other communications equipment