Power plant achieves outstanding ROI with ABB turbocharger upgrades

**Benefits**

- **Longer component life time**
  - Due to lower temperature enabled by the turbocharger upgrade.

- **Reduced overtime**
  - Due to the ability to run longer with a higher degree of confidence, the organization reduced maintenance hours.

- **Fewer penalties**
  - After the upgrade, the organization was able to meet more stable output at contractual targets, reducing associated penalties.

**Cash Flow (Risk-Adjusted)**

- **Initial**
  - Total costs: $(2,000,000)
  - Total benefits: $0
  - Cumulative total: $(2,000,000)

- **Year 1**
  - Total costs: $(1,500,000)
  - Total benefits: $500,000
  - Cumulative total: $(1,500,000)

- **Year 2**
  - Total costs: $(1,000,000)
  - Total benefits: $1,000,000
  - Cumulative total: $(0)

- **Year 3**
  - Total costs: $(500,000)
  - Total benefits: $1,500,000
  - Cumulative total: $1,000,000

**FORRESTER**

A commissioned study conducted by Forrester Consulting on behalf of ABB.

- **11 months**
  - Payback period

- **$1,400,000**
  - In net present value
  - Over three years

- **$470,000**
  - Annual fuel savings
  - Through increase in fuel efficiency (approx).

- **$537,000**
  - Annual revenue increase
  - From an increase in power output of 2.4%