



Whitepaper:

Business Case for Building Increased Electrical Generation Capacity Into Your Oil & Gas Projects

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In this whitepaper we are going to address the need for having spare electrical generation capacity on-hand at oil and gas projects. We will walk you through the reasons why you should have additional generators at your site, the value they will add and the potential costs of not planning for contingencies. We will then walk you through the process of evaluating your major decision factors when defining the need for building out your capacity.

1. The value of having enough power capacity in Oil & Gas projects and the cost of not having enough.

Highlight:

The upside of having enough capacity is preparedness for future eventualities and predictability in production operations.

Positive Gain Value

a) Respond rapidly to adverse situations

The primary reason for having additional power capacity installed at your oil and gas project is to deal with unforeseen eventualities such as the failure of a power source or a dramatic drop in temperature. Too often, oil and gas projects temporarily succumb to the pressure of the inhospitable and isolated environments in which they reside. This results in forced production stoppages while repairs are conducted and arrangements are made for replacement equipment to be transported to the site.

These stoppages cause cost overruns and impact upon cash flow, as the site is no longer capable of generating revenue. For companies whose shares are listed on an exchange, these bumps in the road can impact upon shareholder confidence in the company and put at risk opportunities for future rounds of investment.

With sufficient capacity in place, the site manager can quickly take corrective action when mishaps occur. This reduces the downtime for production and places the project back on track, extracting and delivering resources to waiting customers.

b) Guarantee uninterrupted extraction and output

Providing a steady and continuous flow of oil and gas from your extraction site is a major concern for operators.

This allows for accurate planning for revenue and the related cost of sales. It also provides your customers and the financial markets with reassurance that you can be trusted to deliver your product on time, every time.

c) Maintain monitoring of pressure

Having sufficient levels power capacity ensures that you can monitor the pressure of liquids and gases that are exiting your well. If pressure were to increase unexpectedly it can result in excessive strain on the equipment at the mouth of the well. It can also have a detrimental effect on the pipelines that are transporting your resources. Conversely, if the pressure were to drop off it could be an indication that the well is starting to run dry or that additional drilling must be carried to maximize the yield of the well.

Highlight:

Enough capacity ensures both control and comfort in operations.

d) Retain control of flow

Control of flow is also an important factor that you will want to stay on top of. Monitoring the flow is the first step, but you also need to have functioning equipment in place to maintain a consistent flow of your liquid or gas. This could be in the form of pumps, valves and regulators, and all of the ancillary equipment that are used to retain control over the flow of your resource.

e) Provide comfortable conditions for workers

One of the most important elements of an extraction site are the employees that maintain the equipment and monitor operations. When working at remote locations in inhospitable environments, conditions can never be expected to be luxurious. However, a minimum level of comfort should be afforded to your staff while they are on-site. Having a continuous supply of electricity is key to guaranteeing that your workers are kept warm and dry

while they are off-duty. It also provides them with light to carry out their work, recharging facilities for portable equipment, communications with headquarters and their families, and facilities for cooking and cleaning.

Cost Avoidance Value

a) Downtime resulting in loss of output and revenue

Highlight:

The costs avoided by having enough capacity outweigh the costs of ensuring that capacity.

The biggest short-term costs that results from not having enough capacity is the loss of output and revenue. When you don't have a back-up plan and sufficient levels of failsafe capacity, minor issues can quickly snowball into major problems. This can result in a full shut down in operations while repairs are attempted. In the worst case scenario, new electrical generators will need to be sourced and shipped to the site to get the project up and running once more. This can be time-consuming both in regards to finding a supplier that has the equipment you need, and organizing its delivery to your site. All of this downtime results in revenue that is not being realized, while your overhead costs continue to be incurred.

b) Unfilled contracts leading to penalties

Failure to fulfill your contractual obligations for the delivery of the product can lead to penalties being levied by the other party to the contract. As these penalties compound there may also be interest applied to the amount owing. The longer your operation is unable to continue, the higher the cost of the downtime. These costs can be avoided from the very outset by planning for such eventualities and installing sufficient redundancy capacity.

c) Damaged relationship with customers

If you are regularly breaking the terms of your contracts due to minor problems, or you have one major incident that continues to impede your ability to deliver your product, this will have a negative impact on the relationship with your customer. It may provide them with an advantageous position when the time comes to negotiate your contracts, or they may decide not to risk getting into business with you in future. In this case you will have to face the costs involved with acquiring a new customer, providing them with incentives to go into business with you, and developing and maintaining this relationship. It is almost always less costly to retain an existing customer than it is to acquire a new one.

Highlight:

Different situations of varying severity typically serve as catalyst for the consideration to build failsafe capacity.

d) Unable to take advantage of opportunities to expand.

At early-stage sites, production is typically carried out where the resources are most easily accessible and can be extracted in the most economically efficient manner. Having additional electrical capacity on-hand can allow for expansion of operations at the site to take advantage of changing market conditions or sudden prices hikes. It can also provide for additional drilling and testing away from the main well, which can reveal additional resource deposit that are prime for exploiting.

2. The types of situations that lead to Oil & Gas projects considering to build power capacity using generators.

a) Failure of a generator resulting in a loss of production or revenue.

The most critical incident that leads companies to realise realize the time to build in additional power capacity is: 1) when a generator fails and is out of commission until parts for repairs can be delivered; 2) it is completely replaced. This kind of catastrophic incident can be a serious wake-up call to the managers of a site, putting them in a position, pelted and grilled with questions to answer from their corporate executives and key investors.

This impact can ultimately decide that in the company's future, it is best to build in additional capacity to avoid such situations from arising again.

b) Previous experience of the managers.

Highlight:

Examination of the external competitive and/or regulatory environment may also spur the need and decision for capacity building.

Previous experienced managers are more attentive to ~~of~~ these types of problems that ~~can~~ could possibly arise and the aggressive treatment they could be subjected to if this situation were to happen. Therefore, they will take corrective action in advance of such an issue becoming a threat to the continued production at the site.

c) Learning from mistakes made by competitors.

Another situation which can lead a company to taking pro-active action is when a competitor encounters problems such as the failure of a generator. By virtue of witnessing the difficulties they experience and the advantage they gain over their competitor while they are out of action, the company will decide to build in additional capacity to prevent a similar fate befalling them.

d) Regulatory requirements to have failsafe capacity.

In some jurisdictions, there may be regulatory requirements stating that a certain level of failsafe capacity should be built into each project. If this is a requirement when the project is being planned, then it will be included from the outset, but due to changes in regulation, or in response to accidents or incidents at other sites, it may become necessary to build in additional capacity.

3. The major decision factors related to how to address the building of enough capacity for the project.

a) How much will it cost?

As with most things in business, it quite often comes down to cost when you are considering whether or not to implement additional electrical generation capacity. At first glance, acquiring additional generations may appear to be an unnecessary capital expenditure, but when you consider the downside risk of losing the ability to maintain production from your site and the resultant damage to reputation, relationship and share price, it can be a very small price to pay for ease of mind.

b) How easily can the equipment be delivered to site?

Highlight:

Cost/value, availability and reliability of equipment and major decision factors in the capacity building process. You need a partner who can deliver effectively on each.

The next concern is how difficult it will be to get the new generators to the site. Does the seller have sufficient levels of stock on-hand? Will there be an extended waiting period for the generator to be acquired by the reseller and then have the sale processed? Does the seller organize delivery or will the buyer have to arrange the logistics?

c) Can I get different sizes of generators that suit my needs?

Another issue is the variety of generators available. Smaller sites may not have very high electricity demands and therefore will not require a large generator. At the other end of the scale larger projects will require a lot of electrical capacity and as a result much bigger generators. The needs of a company will vary from project to project, and even on the same site they may require a variety of different generators. Ideally they will be able to find a supplier that can address all of their needs.

d) Is there a warranty for the generators?

When purchasing a generator you will want to know if the seller stands over the quality of the product, especially when the generator has been previously used. You should

always try to find a seller than has a comprehensive testing and certification process for the used generators that they are selling.

4. High-level of how Depco addresses each.

a) Pricing available on the website or call for a quote

Highlight:

Depco provides you with transparent pricing and value. We can work with you to get you the best value for money and get you set-up with the delivery schedule that meets your needs. And through “The Depco Way” we ensure reliability for the equipment and parts you buy from us.

Depco provides pricing for many of their generators on their website, <http://www.depco.com/>. For those generators whose prices are not listed on the website you can call one of their experts at 800-723-3726 to get a quote.

b) Depco provides expedited shipping to get your generator there.

Depco operates a state of the art shipping facility, so once we have helped you to identify the generator that is best suited to your needs we can ship it directly to your site by ship, truck or rail. Depending on the location and means of access to the project we can have your new generator delivered in the shortest time frame possible.

c) Depco has a large quantity of in-stock generators available to address the needs of various sized projects.

You can check out all of the generators currently available on the Depco website at <http://www.depco.com/> or you can call an expert to discuss your needs so we can help you find the generator that best suits you.

d) New generators come with a manufacturer warranty.
Used have been checked by Depco and certified.

All of the generators that enter the Depco facility goes through a rigorous inspection, testing and servicing process that we call "The Depco Way". Once completed **Depco provides a 30-day warranty on used inventory and a 6-month warranty on rebuild equipment** (excluding inventory marked as-is).