Managing Electronics Component Obsolescence

If you have ever been in this situation, you know how troubling this scenario can be. Imagine that you have placed a purchase order for an electronics assembly from your contract manufacturer (CM), and you get that phone call. The voice on the other end of the phone is the customer service representative at that CM, who explains:

'(Several) parts for your instrument are no longer available, so we will not be able to fill your last order placed with us. What would you like us to do?'

At that point, no good options exist, and you are likely faced with a stock-out condition for your product.

Here at Enercon, we understand that electronic components obsolescence is an unfortunate reality of our business, so we have developed a multifaceted approach to respond to this eventuality.
BACKGROUND

Many electronic components have life cycles that are shorter than the life cycle of the end product itself. Market segments such as healthcare, defense and even some industrial applications are more prone to this than most consumer electronics.

These product sectors often fall behind technology upgrades because of the high costs and/or long development times associated with their particular new product development cycle. There are often significant challenges to modify, upgrade and maintain their systems over the life of the product.

Many are "safety critical," and therefore require time-consuming and costly qualification and certification cycles even for relatively minor design changes. As a result, customers in these segments are more focused on sustaining (manufacturing as well as servicing) their products for long periods of time (often 5-10 years or more) than upgrading them.

Obsolescence issues occur when 'slow-to-change' industries depend on a supply chain that was primarily developed to support a rapidly changing industry (such as consumer electronics). To compound the problem, these market segments typically have less control over their electronic part supply chain because they have relatively low production volumes compared to consumer electronics.

ENERCON RESPONSE

For new product developments, we identify components that should be available for a long time. Using an integrated approach - combining available databases along with our internal processes, we identify the precursors to ‘End-Of-Life’ (EOL) scenarios for components, such as a reduction in the number of sources, available inventory, and/or price increases. In addition, we avoid single source solutions where possible. If alternates exist, we work to validate these alternatives up front, and note the alternates on specifications.
For current production, we pro-actively run databases monthly utilizing an automated process. We have our program managers share any feedback to their customers at the earliest signs of obsolescence.

If we do identify EOL for components along the way, we develop a response strategy with the customer, which typically includes some or all of the following:

- Purchase additional inventory (life-time buy, last-time buy)
- Locate alternative components
- Prototype and validate alternatives
- Re-design with more contemporary components

NOTE:
If re-design is necessary, we make sure to include Design-For-Manufacturability (DFM) activities and other cost improvement activities to help justify re-validation expenses

**ENERCON ADVANTAGE**

Serving customer electronics needs since 1980; we have honed our strategies to respond to electronic component obsolescence. With careful planning and coordination with customers, we successfully manage this product life cycle challenge.
By automating many of the processes to identify EOL, we proactively work to identify potential problems with enough time to develop options. And with in-house engineering and product design expertise, we can provide customers with the best response solutions that fit their unique product requirements.

**CONTACT US TODAY!**

To learn more about how Enercon can help you develop your next program, feel free to call or e-mail me with your questions (contact information below).

And, as always, if you are in the early concept phase of a new program, need a production outsource manufacturing partner solution, or are currently anywhere in between, we can quickly jump in and help you out.

Give us a call for a no-obligation project review.

Sincerely,

*Larry Bell*

Vice President of Sales & Marketing
Enercon Technologies

[lbell@enercontechnologies.com](mailto:lbell@enercontechnologies.com)
207-657-7000 - Office
617-513-2112 - Mobile