



## Company Bulletin

for EMC, EMP, HEMP & TEMPEST Protection

### Issue 31

#### Keeping the lights on with MPE filters

Last year MPE supplied more than 50 of its world-leading HEMP protection filters of different power ratings for a major power station project in the USA.

For this new transmission operations control centre serving the Midwest United States, MPE undertook a consultation and design process of several months in conjunction with shielded structure experts Gaven Industries of Saxonburg, Pennsylvania.

Over almost 40 years Gaven Industries have become market-leading integrators in EMI, RFI, EMP and IEMI shielding. Employing 90 staff at their manufacturing facility of over 50,000 ft<sup>2</sup>, they provide, with the complete in-house fabrication of enclosures, standard and custom solutions to protect against the threats of electromagnetic interference and pulse.

Gaven's clients extend over wide-ranging applications for the US armed forces, government agencies, critical infrastructure and the Department of Homeland Security. Their long history as a most reliable provider – coupled with the proven record of MPE's filter products for unmatched performance over long continuous service – were key factors determining their selection for this power plant project.

The power plant covers approximately 60,000 ft<sup>2</sup>. A new building was constructed on the site, necessitating the HEMP protection of facilities occupying some 30,000 ft<sup>2</sup> of space. Being present from day one of virtual design coordination (VDC), Gaven Industries assisted with the evaluation of critical systems and the specification of precisely what shielding would be needed.

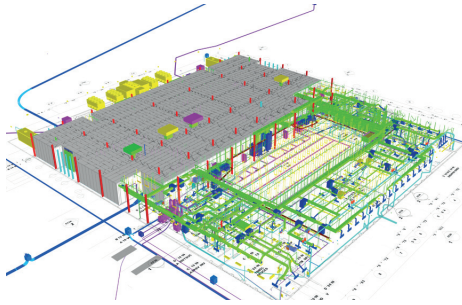
Having provided guidance on the layout and configuration of the building, Gaven then brought in MPE for the specification and design of HEMP filters to meet the overarching criteria of Mil-Std-188-125-1 Appendix B, the protection and test requirements for shielded structures.

Following the design process, MPE manufactured and supplied more than 50 HEMP filters spanning 32A units through to custom 3600A units, including all termination enclosures and connection hardware.

Installation was carried out to the detailed plans and schedule created by Gaven Industries. Post-installation Gaven then performed all required HEMP performance validation testing and also prepared a hardness maintenance / hardness surveillance (HM/HS) plan for facility use.

This plan ensures that the proper care and maintenance of harness critical items (HCI) are performed to ensure the year-over-year viability and protection afforded by the originally installed shielding components.

For comprehensive information on Gaven Industries, please check out their website [www.gavenindustries.com](http://www.gavenindustries.com). To find out more about MPE's HEMP filter ranges, go to [www.mpe.co.uk/category/hemp](http://www.mpe.co.uk/category/hemp) or contact a member of the expert technical team at MPE in Liverpool on +44 [0]151 632 9100.



New control centre for power transmission operations serving Midwest USA



A 10x6ft double-leaf air-seal HEMP protection door designed and manufactured for the US power station project by Gaven Industries

