

AIR UNIVERSITY  
LEMAY CENTER FOR DOCTRINE  
DEVELOPMENT AND EDUCATION



**ELECTROMAGNETIC DEFENSE TASK  
FORCE (EDTF) 2.0**  
*2019 REPORT*

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*“As we demonstrate courage, leadership, and a willingness to learn and compete with novel ideas, there must be a demand for accountability in the critical areas that sustain our national welfare. Such accountability requires uniform standards, rigorous physical component testing, and incentives for manufacturers and customers to both demand and integrate electromagnetic spectrum (EMS) resilience into new and existing systems and designs. For example, estimates for end-to-end electromagnetic pulse (EMP) hardening of the **US power grid and critical infrastructure range from \$5 billion to \$50 billion**, and while it is recognized that an ideal outcome would be the complete protection of the nation’s infrastructure, resource constraints make this outcome unlikely. **Yet, the use of military standards** to harden nuclear power stations, for example, is a justifiable investment from a risk and security standpoint. **Where such improvements cannot be made, the US and its allies must find intelligent, low-cost, and practical solutions that enhance resilience in peace and in times of conflict.**”*