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Altri autori (Persone)	McDonoughPeter W
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Nota di contenuto	Chapter 1: Introduction to Seismic Hazards; Chapter 2: Protection of Steel Pipelines from Permanent Ground Deformation Using EPS Geofoam; Chapter 3: Internal Pipe Lining as a Mitigation Tool; Chapter 4: System Modeling for Seismic Events; Chapter 5: Pipeline Integrity Management; Chapter 6: Seismic Gas Shutoff Valves and Excess Flow Valves
Sommario/riassunto	Sponsored by the Gas and Liquid Fuels Committee of the Technical Council on Lifeline Earthquake Engineering of ASCE. Seismic Resilience of Natural Gas Systems: Improving Performance highlights seismic risk mitigation issues of interest to engineers and managers responsible for the performance and safety of natural gas pipelines. Whether an earthquake fault is evident on the surface or hidden underground, faults are the most catastrophic failure mechanism for pipelines, although ground shaking, soil liquefaction, landslides, and tsunamis also threaten the integrity of pipeline systems. When a pipeline carries natural gas, the effects of a rupture can be hazardous to life and destructive to property. This collection of essays examines five different approaches to increasing the seismic resilience of natural gas pipelines: use of geofoam as backfill for pipelines; internal pipe lining techniques to increase pipeline strength; computer-based facility

system modeling to anticipate failures; pipeline integrity management, which now includes addressing seismic hazards; and seismic shutoff valves and excess flow valves. This book is an up-to-date reference for engineers and managers working to enhance the seismic resilience of natural gas pipeline systems.