

# The North Korea EMP Threat

[Click here to view as PDF.](#)

“A single warhead delivered by North Korean satellite could blackout the national electric grid and other life-sustaining critical infrastructures for over a year.”

-CONGRESSIONAL EMP COMMISSION

## INTRODUCTION

**The other EMP.** To Seattleites, the initials EMP stand for Experience Music Project, founded and funded by Microsoft co-founder and mega-billionaire Paul Allen. But to those of you who recall our [May 19th EVA](#), it has a much more ominous meaning: Electromagnetic Pulse.

In that EVA, we pointed out our concerns about North Korea’s repetitive missile “failures” which have coincidentally—or not—exploded at an altitude above the earth’s surface considered by experts to be optimal for causing an EMP. Fortunately, the missing ingredient has been a nuclear device whose detonation might possibly fry America’s electric grid.

During last week’s anxiety about the escalating threat of North Korea launching intercontinental ballistic missiles (ICBMs) at Guam, or possibly the US mainland, there was scant attention given to the EMP threat. As the first part of this week’s Guest EVA indicates, it would be far easier for North Korea to detonate a nuke 20 miles or more above the US than it would be to pull off an ICBM attack. Yet, the consequences could be just as devastating.

With this issue, we are asking our left-of-center readers to indulge us in considering the warnings of the ever-controversial Newt Gingrich. Politics aside, his tocsins in this brief piece are very consistent with what we’ve seen from other sources (including a recent chilling piece from [The Economist](#)).

Since we don’t claim to be experts on this subject, we ran the Gingrich article past one of our clients who, for many years, was a senior executive at Washington state’s largest electric utility company. He largely agreed with the article’s key points, though he felt it was too alarmist on the aspect of water systems not working and hospitals losing power. He notes that many water systems are gravity-fed and most hospitals have diesel-fired back-up generators. (However, per The Economist article, if the power outage lasted long enough, access to fuel would become a concern.)

Moving off the EMP theme--and to an equally polarizing personality--the second part of this EVA is based on a recent Op-Ed in *The Hill* by former US ambassador to the UN, John Bolton. Widely known as a foreign policy hawk, Mr. Bolton advocates a novel diplomatic solution to the North Korean crisis. However, he does conclude that if this fails, a pre-emptive strike might be essential to protect America and its allies (we don’t agree with this view and fervently hope the situation doesn’t devolve to that point). He also blames the Clinton and Obama administrations for the current impasse but neglects to point out that George W. Bush’s presidency did precious little to inhibit North Korea’s nuclearization.

Whether China would ever cooperate with the US on Mr. Bolton's core proposal—reunifying the Korean peninsula—is extremely speculative. But one thing that jumped out at me was his point about China's ultimate nightmare: the growing possibility of Japan going nuclear if North Korea's "supreme leader", Kim Jong-un, continues to threaten America and Asia Pacific with his supposed nukes.

Probably a more likely scenario is a behind-the-scenes coup orchestrated by Beijing, replacing the unpredictable and barbaric Kim with someone willing to tow the Chinese line. (Mr. Kim better have some brave food tasters on his staff!) Either way, that sounds a lot better to this worried-about-his-six-grandchildren man than a military solution.

## **THE NORTH KOREAN EMP THREAT BY NEWT GINGRICH**

North Korea is already one of the most dangerous places in the world, and it's becoming more perilous by the day.

[In late May], Pyongyang completed its ninth ballistic missile test [of 2017]. The North Korean state run media said its maniacal leader, Kim Jong-un, threatened to send a bigger "gift package" to the United States.

The same day, the United States tested its ability to intercept long-range ballistic missiles potentially fired from North Korea. Missile Defense Agency Director Vice Adm. Jim Syring announced the test was successful [a few days later].

I'm glad we are honing our ability to stop intercontinental ballistic missiles over the Pacific, but I hope our military leaders recognize that traditional nuclear war is only half of the threat the Kim Jong-un regime poses.

As I testified at the Senate Committee on Energy and Natural Resources earlier this 2025, the North Koreans have another offensive option, which they may already be able to execute and would be devastating to the United States – a weaponized electromagnetic pulse.

An electromagnetic pulse, or EMP, occurs when a relatively small but carefully designed nuclear warhead is detonated in the atmosphere. The explosion causes what can best be described as a massive power surge, which can damage or disable electrical devices for hundreds of miles on the ground below. As I told the Senate Committee, such an attack would be catastrophic to the United States because we are an electricity-dependent nation and our grid is ill-prepared to handle it.

I am not talking about simple, isolated, short-term blackouts like those which have occurred in New York, Los Angeles, or Detroit. These blackouts could encompass entire regions. Without proper preparation, the grid disruption (and destruction) caused by an EMP could take months to years to repair. Non-perishable foods would spoil from lack of refrigeration. Hospitals would run out of life-saving, temperature-controlled medications within days. Dialysis and other medical devices would stop working. Water systems that rely on electricity would stop pumping water and pipes would burst from the weight and pressure. The cascade of consequences of a protracted regional power outage would be devastating.

Bill Forstchen, who has been my co-author on several novels, lays out the effects of an EMP on a small town in North Carolina after the electrical grid was disabled in his New York Times bestselling novel, *One Second After*. Although it is a work of fiction, it is extremely well-researched – and terrifying.

But it is not impossible for this fiction to become a reality. Tom Clancy, after all, wrote about an enemy of the United States weaponizing a commercial airplane seven years before the terrorist attacks of September 11, 2001.

Peter Vincent Pry, who leads the Task Force on National and Homeland Security and served on the Congressional EMP Commission, warns that North Korea may be closer to EMP-capability than many experts think.

On May 4, coincidentally the same day I spoke to the Senate Energy and Natural Resources Committee, Pry wrote that many in the national security world and media have erroneously downplayed the threat from Pyongyang. A successful nuclear strike on U.S. soil would require a great deal of precision and advanced missile technology – two things the North Koreans have apparently not yet attained – but Pry points out a successfully launched EMP requires much less.

“An EMP attack entails detonating a nuclear weapon at high-altitude, above the atmosphere, so no reentry vehicle is necessary to penetrate the atmosphere and blast a city. The area of effect of an EMP is so enormous — a warhead detonated at an altitude of 30 kilometers will generate an EMP field on the ground having a radius of 600 kilometers — that an accurate guidance system is unnecessary,” Pry wrote.

It is good that our military leaders have all eyes trained on North Korea, but we must do more to mitigate the threat.

As I told senators, Congress needs to work to cut red tape and enable innovation so that we can work to harden our power infrastructure against an EMP attack in communities across the United States. This means, in part, designing systems that favor resistance, resilience, and redundancy over simple efficiency. It also means moving to a more diversified grid, which can be more easily restored.

This preparation will require active collaboration between federal, state, and local governments as well as the private sector to foster an environment for innovation and to remove the hurdles preventing the quick responses that will be necessary to defend our power grid.

This will not be easy or cheap, but the threat is real – and we don’t want to be caught in the dark.

## **CHINA IS OUR LAST DIPLOMATIC HOPE FOR NORTH KOREA BY JOHN R. BOLTON**

Former National Security Advisor Susan Rice acknowledged last week that America’s policies regarding North Korea’s nuclear-weapons program over the last three administrations had failed. She said, rightly, “You can call it a failure. I accept that characterization of the efforts of the United States over the last two decades.”

Former Vice President Al Gore said much the same. They should know. They served under

President Bill Clinton, who started things rolling downhill with the [Agreed Framework](#) of 1994. This misbegotten deal provided Pyongyang 500,000 tons of heavy fuel oil annually and two light-water nuclear reactors in exchange for the North's promise to abandon its nuclear-weapons efforts.

Pyongyang violated its promise before the ink was dry. In 1999, former Secretary of State James Baker denounced Clinton's approach as "a policy of appeasement." Baker's characterization also applies to much of the subsequent U.S. diplomacy. North Korea has always been willing to promise to abandon its nuclear ambitions to get tangible economic benefits. It just never gets around to honoring its commitments.

After 25 years of failure, we need not tarry long (or at all) on more diplomacy with Pyongyang. Fred Ikle once characterized the North as capable of "boundless mendacity." He was being charitable. Talking to North Korea is worse than a mere waste of time. Negotiations legitimize the dictatorship, affording it more time to enhance its nuclear and ballistic-missile capabilities.

Today, only one diplomatic option remains, and it does not involve talking to Pyongyang. Instead, President Trump should urge President Xi Jinping that reunifying the Korean Peninsula is in China's national interest. This is a hard argument to make, requiring reversal of decades of Chinese policy. It should have been broached years ago, but it is still doable. There is now growing awareness in China that maintaining the two Koreas, especially given the current nuclear crisis, does not benefit China long-term.

Historically, the Korean Peninsula's 1945 partition was always intended to be temporary. Kim Il-Sung's 1950 invasion of South Korea and three years of ultimately inconclusive war resulted in hardening the bifurcation into its current manifestation. Beijing has backed the status quo, believing that North Korea provided a buffer between Chinese territory and U.S. military forces.

Maintaining its satellite, however, has been expensive and risky. China has long supplied more than 90 percent of the North's energy needs, and vast quantities of food and other assistance to sustain Pyongyang's gulag. China has also expended enormous political and diplomatic energy, costing it precious international credibility, to protect the North's erratic regime. Initially, China saw the North's nuclear and ballistic-missile programs as a problem for America, Japan and South Korea rather than itself. That notion has disappeared, however, under the harsh prospect that today's nuclear crisis will be merely the first of many with North Korea. Moreover, Japan is now increasingly likely to seek its own nuclear capability, a nightmare for China in some respects more troubling than America.

Confronted by this new, deeply threatening reality, Beijing's views on Korean reunification are ripe for change. China has never applied its uniquely strong economic leverage on Pyongyang because it feared so doing could cause catastrophic collapse of the North's regime. That would in turn produce two unacceptable consequences: massive Korean refugee flows across the border into China, and American and South Korean troops crossing the DMZ and quickly reaching the Yalu and Tumen Rivers.

The answer to China's fear of uncontrolled collapse is a jointly managed effort to dismantle North Korea's government, effectively allowing the swift takeover of the North by the South. China can start by quietly bribing the Kim regime's top military and civilian officials, offering political asylum and a safe exile for them and their families in China, while simultaneously cutting off energy and other supplies to the North. Seoul can also offer inducements to key North

Korean leaders, reminding them what life could be like in a post-Kim world.

Simultaneously, massive information efforts should be launched throughout the North to spread word quickly on what is happening. The population may lack cell phones and the Internet, but they are far more aware of the outside world than conventional stereotypes. The end of North Korea, and hence the end of its nuclear threat, would be inevitable. The process will undoubtedly be dangerous and somewhat chaotic, but far less so than a completely uncontrolled collapse. And whatever the risks, they pale before the risks of nuclear conflict emanating from the erratic Kim regime.

Washington can offer Beijing two assurances to assuage its concerns. First, we would work closely with China to prevent massive refugee flows either into China or South Korea. Our common interests here are clear. Second, as the North begins to collapse, allied forces would necessarily cross the DMZ to locate and secure Pyongyang's nuclear, chemical and biological weapons stockpiles and to maintain civil order.

These forces would ultimately reach China's border, but we can commit to Beijing that Washington will not station troops there for a sustained period. Instead, we would pledge to base virtually all U.S. military assets near Pusan at the Peninsula's southern tip, to be available for rapid deployment around Asia. They would not constitute a watch on the Yalu.

The alternative to this last available diplomatic play is military force. The imperative of protecting innocent American civilians from the long-term threat of North Korea's nuclear capability dictates that we should be willing to strike those capabilities pre-emptively. But before that, who will argue against this one last realistic diplomatic effort?

---

## OUR CURRENT LIKES AND DISLIKES

No changes this week.

### LIKE

- Large-cap growth (during a correction)
- International developed markets (during a correction)
- Canadian REITs (on a pull-back after a healthy recent run-up)
- Cash
- Publicly-traded pipeline partnerships (MLPs) yielding 7%-12%
- Intermediate-term investment-grade corporate bonds, yielding approximately 4%
- Gold-mining stocks
- Gold
- Select blue chip oil stocks
- Mexican stocks (at lower prices after this year's strong rally)
- Solar Yield Cos on a pull-back
- Bonds denominated in renminbi trading in Hong Kong (dim sum bonds)
- Short euro ETF

### NEUTRAL

- Most cyclical resource-based stocks
- Short-term investment grade corporate bonds

- High-quality preferred stocks yielding 6%
- Mid-cap growth
- Emerging stock markets, however a number of Asian developing markets, ex-India, appear undervalued
- Floating-rate bank debt (junk)
- Select European banks
- BB-rated corporate bonds (i.e., high-quality, high yield)
- Investment-grade floating rate corporate bonds
- Long-term Treasury bonds
- Long-term investment grade corporate bonds
- Intermediate-term Treasury bonds
- Long-term municipal bonds
- Intermediate municipal bonds with strong credit ratings
- Emerging bond markets (dollar-based or hedged); local currency in a few select cases

## DISLIKE

- US-based Real Estate Investment Trusts (REITs) (once again, some small-and mid-cap issues appear attractive)
- Small-cap value
- Mid-cap value
- Small-cap growth
- Lower-rated junk bonds
- Large-cap value
- Canadian dollar-denominated bonds
- Short yen ETF (in fact, the yen looks poised to rally)
- Emerging market bonds (local currency)
- Emerging market bonds (local currency)

*DISCLOSURE: This material has been prepared or is distributed solely for informational purposes only and is not a solicitation or an offer to buy any security or instrument or to participate in any trading strategy. Any opinions, recommendations, and assumptions included in this presentation are based upon current market conditions, reflect our judgment as of the date of this presentation, and are subject to change. Past performance is no guarantee of future results. All investments involve risk including the loss of principal. All material presented is compiled from sources believed to be reliable, but accuracy cannot be guaranteed and Evergreen makes no representation as to its accuracy or completeness. Securities highlighted or discussed in this communication are mentioned for illustrative purposes only and are not a recommendation for these securities. Evergreen actively manages client portfolios and securities discussed in this communication may or may not be held in such portfolios at any given time.*