IAFS 4500: Capstone Paper
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A Comparative Assessment of US Strategies to Maintain Nuclear Nonproliferation in Iran

#### **Introduction:**

In the 21st century, few contemporary US foreign policy issues are comparable to the unique challenges of maintaining Iranian nuclear nonproliferation. Since the first reports of the Islamic Republic's intention to procure nuclear weapons emerged in 2003, US policymakers have made its prevention a key facet of long-term US security objectives within the Middle East. In 2016, years of diplomacy and negotiation culminated in the signing of the Joint Comprehensive Plan of Action (JCPOA), an agreement that provided a framework to incentivize Tehran to avoid further advancing its nuclear program in exchange for sanction relief. However, just two years later, the Trump administration decided to withdraw from the agreement, leaving the future of the Iranian nuclear program largely uncertain.

Since assuming office in 2021, the Biden administration has made attempting to revive the JCPOA agreement the primary emphasis of its Iranian nonproliferation strategy.<sup>3</sup> However, the US and its allies have thus far been unsuccessful in renegotiating a deal and progress has stalled since the end of 2021.<sup>4</sup> The administration has indicated that it considers direct military action as an option but only as a last resort.<sup>5</sup> Among foreign policy stakeholders and scholars, there is widespread concern that the status quo approach of diplomacy appears to be failing. However, there is little consensus regarding what alternatives might be viable options for the administration to consider.

<sup>&</sup>lt;sup>1</sup> Nikou, S. (2021, August 17). Timeline of Iran's Nuclear Activities. *United States Institute of Peace, The Iran Primer*. Retrieved from: https://iranprimer.usip.org/resource/timeline-irans-nuclear-activities

<sup>&</sup>lt;sup>2</sup> Nikou. 2021. Timeline of Iran's Nuclear Activities.

<sup>&</sup>lt;sup>3</sup> Ravid, B. (2023, April 3). U.S. discussing freeze-for-freeze approach to Iran nuclear program. *Axios*. Retrieved from: <a href="https://www.axios.com/2023/04/03/iran-biden-proposal-freeze-nuclear-activity-deal">https://www.axios.com/2023/04/03/iran-biden-proposal-freeze-nuclear-activity-deal</a>

<sup>&</sup>lt;sup>4</sup> Magid, J. (2022, December 20). Video surfaces of Biden saying Iran nuclear deal is 'dead'; White House doesn't deny. *Times of Israel*. Retrieved from: <a href="https://www.timesofisrael.com/video-surfaces-of-biden-saying-iran-nuclear-deal-is-dead-white-house-doesnt-deny/">https://www.timesofisrael.com/video-surfaces-of-biden-saying-iran-nuclear-deal-is-dead-white-house-doesnt-deny/</a>

<sup>&</sup>lt;sup>5</sup> TOI Staff. (2023, March 24). US army chief: Iran could produce enough material for nuclear weapon within 2 weeks. *Times of Israel*. Retrieved from: <a href="https://www.timesofisrael.com/us-army-chief-iran-could-produce-enough-material-for-nuclear-weapon-within-2-weeks/">https://www.timesofisrael.com/us-army-chief-iran-could-produce-enough-material-for-nuclear-weapon-within-2-weeks/</a>

In this paper, I seek to provide an answer to the question: Which policy option available to the Biden administration is most likely to succeed at maintaining Iranian nuclear nonproliferation in the short term? I begin my paper by conducting a literature review of the recent policy perspectives that have been proposed by stakeholders and scholars on this subject, as well as the risks that have been proposed in a scenario where weaponization occurs. Drawing from these perspectives, I present four viable policy options that are currently available to the administration: [1] maintaining the status quo of diplomacy, [2] deterrence, [3] destroying critical infrastructure, and [4] nonintervention.

In the remainder of the paper, I seek to assess the likely outcomes of each respective option by extrapolating on past events while accounting for present circumstances. I complete this analysis by offering a policy prescription stating that the Biden administration should opt to maintain the status quo approach of diplomacy. I justify this prescription by reasoning that hard deterrence and attacks on infrastructure would most likely lead to escalation, while abandoning the goal of nonproliferation would remove the factors that are currently preventing weaponization and encourage other states to develop nuclear capabilities as well. I conclude by addressing some of the gaps in my research and identifying future lines of inquiry that could further optimize my policy prescription.

### **Current Situation:**

Though there are many diplomatic issues associated with the Iranian regime, such as human rights violations and its sponsorship of proxy militants, my policy analysis specifically focuses on addressing the challenge of maintaining nonproliferation and the risks of failure. The current nuclear situation is such a high priority to US foreign policy interests because of the

consequences that could occur if Iran were to successfully weaponize its nuclear stockpile. These consequences can be grouped into two categories: the immediate security challenges of a nuclear-capable Iran, and a potential regional arms cascade effect.

The first risk category involves the direct risks associated with the Iranian military possessing nuclear capabilities. Though it is generally understood that Iran's interest in becoming a nuclear power is primarily driven by a desire for self-preservation,<sup>6</sup> there are still major concerns regarding the possibility of such weapons being used in a conflict. It is worth noting that it is unlikely that the regime would authorize an offensive nuclear strike against neighboring Muslim countries due to ideological reasons.<sup>7</sup> Furthermore, while the regime has a long history of hostility towards Israel, the strength of the Israeli military and the possibility of US involvement would deter any deliberate preemptive strike.<sup>8</sup> The most likely scenario of nuclear weapons being used in the short term is an exchange between Israel and Iran due to escalation over a comparatively minor incident.

The second risk category centers on the possibility that Iran's acquisition of a nuclear weapon would create a cascade effect leading to the more widespread proliferation of nuclear arms among the states in the Persian Gulf and Middle East. By rapidly shifting the balance of power in its favor, Iran's nuclear program could compel neighboring states to respond by developing their own nuclear capabilities. The most likely candidate to pursue nuclearization as a

<sup>&</sup>lt;sup>6</sup> Kam, Ephraim. 2021, July. Iran's Deterrence Concept. *Institute for National Security Studies: Strategic Assessment*, Vol 24, No. 3. Retrieved from: https://strategicassessment.inss.org.il/wp-content/uploads/2021/08/Irans-Deterrence-Concept.pdf

<sup>&</sup>lt;sup>7</sup> Brewer, E. (2021, October 15). Iran's Evolving Nuclear Program and Implications for U.S. Policy. *Center for Strategic and International Studies (CSIS)*. Retrieved from: <a href="https://www.csis.org/analysis/irans-evolving-nuclear-program-and-implications-us-policy">https://www.csis.org/analysis/irans-evolving-nuclear-program-and-implications-us-policy</a>

<sup>&</sup>lt;sup>8</sup> Brewer. 2021. Iran's Evolving Nuclear Program and Implications for U.S. Policy.

direct response to Iran would be Saudi Arabia. Riyadh and Tehran have been longtime rivals, waging a decades-long proxy war for regional hegemony while positioning themselves on opposing sides of the Sunni-Shia divide in the Islamic world. Riyadh would undoubtedly see a nuclear-capable Iran as a major threat and would feel compelled to resolve the abrupt power imbalance by constructing its own arsenal. 10

Through this method of power balancing, Iran's actions could foreseeably lead Saudi
Arabia to nuclearize which would then encourage other states with regional security concerns,
such as the United Arab Emirates, to follow suit. Like the aforementioned hypothetical scenario
of a nuclear exchange between Iran and Israel, it is unlikely that any of these states would opt for
a preemptive nuclear strike against an adversary. However, the proliferation of such destructive
weapons in a region that is exceptionally prone to conflict would dramatically increase the
possibility of a nuclear exchange due to escalation over a more minor dispute. This would
certainly not bode well for the long-term prospects of regional stability and the human security
of the populations that would be affected.

Today, Tehran is the closest it has ever been to crossing the weaponization threshold and becoming a nuclear-capable state. In February 2023, the International Atomic Energy Agency (IAEA) reported that the Iranian military could produce weapons-grade fissile material enriched to 90% in approximately two weeks and assemble a fully armed nuclear weapon in a mere matter of months. These estimates reflect a significant advancement of Iran's nuclear capabilities since

<sup>&</sup>lt;sup>9</sup> Einhorn, R. Nephew, R. (2015, May 31). The Iran nuclear deal: Prelude to proliferation in the Middle East?. *Brookings*. Retrieved from: <a href="https://www.brookings.edu/research/the-iran-nuclear-deal-prelude-to-proliferation-in-the-middle-east/">https://www.brookings.edu/research/the-iran-nuclear-deal-prelude-to-proliferation-in-the-middle-east/</a>

<sup>&</sup>lt;sup>10</sup> Einhorn, R. Nephew, R. (2015, May 31). The Iran nuclear deal: Prelude to proliferation in the Middle East?. *Brookings*. Retrieved from: <a href="https://www.brookings.edu/research/the-iran-nuclear-deal-prelude-to-proliferation-in-the-middle-east/">https://www.brookings.edu/research/the-iran-nuclear-deal-prelude-to-proliferation-in-the-middle-east/</a>

<sup>&</sup>lt;sup>11</sup> Einhorn. Nephew. 2015. The Iran nuclear deal: Prelude to proliferation in the Middle East?.

<sup>&</sup>lt;sup>12</sup> Albright, D. Burkhard, S. Faragasso, S. Stricker, A. (2023, March 3). Analysis of IAEA Iran Verification and Monitoring Report - February 2023. *Institute for Science and International Security*. Retrieved from: https://isis-

the US withdrawal from the JCPOA in 2018.<sup>13</sup> However, at present, it does not appear as though Tehran is actively seeking to weaponize its nuclear stockpile, leaving open the possibility that nonproliferation might still be an achievable goal.<sup>14</sup>

Since the February 2023 report, the US and its allies have increased their public rhetoric warning about the potential ramifications that Tehran will face if it pursues weaponization. In Europe, representatives from Britain, France, and Germany have threatened to utilize a provision in the JCPOA framework to reimplement UN sanctions on oil exports and banking if the regime crosses the 90% enrichment threshold. Though US sanctions were reintroduced when the Trump administration withdrew from the deal, UN sanctions have remained inactive. As original signatories of the deal, Britain, France, or Germany could all individually trigger the "snapback" provision which would rapidly reimplement UN sanctions without the ability to be vetoed. 16

Israel has repeatedly warned that it will utilize direct military force if necessary and is actively considering the option of a preemptive strike.<sup>17</sup> In response to these threats, the regime stated that it will consider the US responsible for any attack carried out by Israel.<sup>18</sup> On May 4<sup>th</sup>, US National Security Advisor Jake Sullivan stated that Israel would have the freedom to carry

online.org/uploads/iaea-

reports/documents/Analysis of Feb 2023 IAEA Iran Verification Report March 3 2023 Final.pdf

<sup>&</sup>lt;sup>13</sup> Albright, Burkhard, Faragasso, & Stricker. 2023. Analysis of IAEA Iran Verification and Monitoring Report - February 2023.

<sup>&</sup>lt;sup>14</sup> Albright, D. Burkhard, S. Faragasso, S. Stricker, A. (Albright, D. Burkhard, S. Faragasso, S. Stricker, A. (2023, March 3). Analysis of IAEA Iran Verification and Monitoring Report - February 2023. *Institute for Science and International Security*. Retrieved from: <a href="https://isis-online.org/uploads/iaea-reports/documents/Analysis">https://isis-online.org/uploads/iaea-reports/documents/Analysis</a> of Feb 2023 IAEA Iran Verification Report March 3 2023 Final.pdf

<sup>&</sup>lt;sup>15</sup> Mohammed, Arshad. Irish, John. Landay, Jonathan. Hafezi, Parisa. 2023, May 5. Analysis: Smoldering Iran nuclear crisis risks catching fire. *Reuters*. Retrieved from: <a href="https://www.reuters.com/world/middle-east/smoldering-iran-nuclear-crisis-risks-catching-fire-2023-05-05/">https://www.reuters.com/world/middle-east/smoldering-iran-nuclear-crisis-risks-catching-fire-2023-05-05/</a>

<sup>&</sup>lt;sup>16</sup> Mohammed et al. 2023. Analysis: Smoldering Iran nuclear crisis risks catching fire.

<sup>&</sup>lt;sup>17</sup> Sindel, Yonatan. 2023, April 5. IDF Chief: 'We can carry out an attack on Iran even without the USA'. *i24 News*. Retrieved from: <a href="https://www.i24news.tv/en/news/israel/defense/1680704400-idf-chief-we-can-carry-out-an-attack-on-iran-even-without-the-usa">https://www.i24news.tv/en/news/israel/defense/1680704400-idf-chief-we-can-carry-out-an-attack-on-iran-even-without-the-usa</a>

<sup>&</sup>lt;sup>18</sup> Al Mayadeen Staff. 2023, May 6. Iran holds US responsible for any Israeli attack on nuclear program. *Al Mayadeen English*. Retrieved from: <a href="https://english.almayadeen.net/news/politics/iran-holds-us-responsible-for-any-israeli-attack-on-nuclear">https://english.almayadeen.net/news/politics/iran-holds-us-responsible-for-any-israeli-attack-on-nuclear</a>

out an attack against Tehran if it deems it necessary, but that the administration intends to continue to deter further advancement through non-military methods while working towards negotiating a new nuclear deal with the regime.<sup>19</sup> Overall, tensions have escalated significantly over the last year while little progress has been made towards any tangible diplomatic gains.

#### **Literature Review:**

In response to the lack of success reviving the JCPOA, and the rapid advancement of Iran's nuclear capabilities in recent years, some US foreign policy stakeholders have argued that the time is right for a new approach to nonproliferation. They have suggested that a more direct application of US military force is necessary to successfully deter Iran from further advancing its nuclear capabilities. Proponents of the use of military force do not believe that diplomacy and sanctions are alone sufficient to ensure nonproliferation. Instead, they believe that the US strategy must seek to utilize the threat of direct military involvement as both a potential deterrent to weaponization and a means to deny further program advancement.

The deterrent portion of this argument is perhaps best exemplified by a report published in March 2023 by the Center for New American Studies (CNAS).<sup>20</sup> The authors posit that the regime's primary stake in pursuing nuclear arms development is self-preservation. They argue that it then follows that the regime can be deterred from further advancement if it comes to see the pursuit of nuclear arms as an existential risk to its survival. By threatening direct military strikes in response to further advancement, the US could lead Iranian officials to view their

<sup>&</sup>lt;sup>19</sup> Harkov, Lahav. 2023, May 5. Israel has freedom to act against Iran nuclear threat - US. *The Jerusalem Post*. Retrieved from https://www.jpost.com/international/article-742190

<sup>&</sup>lt;sup>20</sup> Lord, J. Baigal, A. Streling, H. Latwin, S. (2023, March). Disarming the Bomb, Distilling the Drivers and Disincentives for Iran's Nuclear Program. *Center for New American Studies*. Retrieved from: <a href="https://s3.us-east-1.amazonaws.com/files.cnas.org/documents/DisarmingtheBomb">https://s3.us-east-1.amazonaws.com/files.cnas.org/documents/DisarmingtheBomb</a> Final.pdf?mtime=20230328102525&focal=none

nuclear program as a greater liability than a benefit to the regime's longevity and their personal safety.

Other researchers have added to this argument by outlining the reasons why diplomacy is unlikely to succeed in the future. The Atlantic Council, a US foreign policy think tank, published a brief in March 2023 claiming that the Russian invasion of Ukraine and an increasingly multipolar global power distribution have encouraged Tehran to reject attempts to revive the JCPOA.<sup>21</sup> Consequently, the brief concluded, the US and its allies must consider alternative approaches including doubling down on sanctions as a deterrent and conducting targeted military strikes to eliminate key nuclear infrastructure.

Similarly, a recent policy report published the Washington Institute added to this argument with the assertion the JCPOA, at best, prolongs the issue of Iranian nuclear advancement.<sup>22</sup> They claim that the regime is unlikely to reconsider an agreement due to an increase in hardliner influence in government and a shift in economic factors that have limited the efficacy of sanctions as a tool of coercion. Because of this, they argue, the threat of military force should play a larger role in deterring future advancement and that the US must signal a credible commitment to the use of force if Tehran pursues weaponization.

The Heritage Foundation, a conservative US thinktank, offered similar arguments in a policy brief published in December 2022.<sup>23</sup> The brief claims the nuclear deal option is "illusory"

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<sup>&</sup>lt;sup>21</sup> Brodsky, J. (2023, March 15). World powers have spent years trying to save the JCPOA. That's more time than it was fully implemented and why they need a reset. *Atlantic Council*. Retrieved from: <a href="https://www.atlanticcouncil.org/blogs/iransource/world-powers-have-spent-years-trying-to-save-the-jcpoa-thats-more-time-than-it-was-fully-implemented-and-why-they-need-a-reset/">https://www.atlanticcouncil.org/blogs/iransource/world-powers-have-spent-years-trying-to-save-the-jcpoa-thats-more-time-than-it-was-fully-implemented-and-why-they-need-a-reset/</a>

<sup>&</sup>lt;sup>22</sup> Eisenstadt, M. (2022, November 29). Iran's Nuclear Hedging Strategy: Shaping the Islamic Republic's Proliferation Calculus. *The Washington Institute*. Retrieved from: <a href="https://www.washingtoninstitute.org/policy-analysis/irans-nuclear-hedging-strategy-shaping-islamic-republics-proliferation-calculus">https://www.washingtoninstitute.org/policy-analysis/irans-nuclear-hedging-strategy-shaping-islamic-republics-proliferation-calculus</a>

<sup>&</sup>lt;sup>23</sup> Brookes, P. Phillips, J. (2022, December 8). The Biden Administration's Iran Plan Won't Work: Time for Plan B. *The Heritage Foundation*. Retrieved from: <a href="https://www.heritage.org/middle-east/report/the-biden-administrations-iran-plan-wont-work-time-plan-b">https://www.heritage.org/middle-east/report/the-biden-administrations-iran-plan-wont-work-time-plan-b</a>

and that even if it could be successfully revived, doing so would bolster the regime. The sanction relief offered by a new deal would give the regime billions in financial benefits in a matter of years but would not be sufficient to secure long-term nonproliferation. The brief suggests that the Biden administration should implement a multifaceted policy of military deterrence, with an emphasis on providing support to Israel as a proxy.

Though support for the use of force has grown in recent months, there are still many who defend the status quo policy of the Biden administration and defend the goal of negotiating a new deal reminiscent of the JCPOA. Defenders of the status quo generally acknowledge the problems associated with Washington's inability to renegotiate a deal. However, they claim that the alternatives to the diplomatic approach that critics have proposed are unlikely to achieve any preferable outcome and could also result in conflict escalation.

The International Crisis Group exemplified this stance in a report published in September 2022, arguing that while the present no-deal scenario is a potentially dangerous one, armed confrontation would most likely accelerate Iran's nuclear advancement. <sup>24</sup> Consequently, they assert that the US and its allies must redouble their negotiation efforts in the absence of a viable alternative. A Brookings Policy Brief published in May expresses similar concerns, asserting that direct military confrontation would expedite nuclear weaponization and that the US could not exert adequate economic pressure to destabilize or coerce the regime without a deal. <sup>25</sup> In a direct criticism of the previously mentioned CNAS report, an author from the think tank Responsible

<sup>&</sup>lt;sup>24</sup> International Crisis Group. (2022, September 12). Is Restoring the Iran Nuclear Deal Still Possible?. *International Crisis Group*. Retrieved from: <a href="https://www.crisisgroup.org/b87-middle-east-north-africa/gulf-and-arabian-peninsula/iran/restoring-iran-nuclear-deal-still">https://www.crisisgroup.org/b87-middle-east-north-africa/gulf-and-arabian-peninsula/iran/restoring-iran-nuclear-deal-still</a>

<sup>&</sup>lt;sup>25</sup> Einhorn, R. (2022, May). Reviving the JCPOA is the better alternative — but can it be made sustainable?. *Brookings*. Retrieved from: <a href="https://www.brookings.edu/research/reviving-the-jcpoa-is-the-better-alternative-but-can-it-be-made-sustainable/">https://www.brookings.edu/research/reviving-the-jcpoa-is-the-better-alternative-but-can-it-be-made-sustainable/</a>

Statecraft argued that few things are more likely to convince the regime of a need for a nuclear deterrent than direct threats of US military action.<sup>26</sup>

Other defenses of the diplomatic approach focus more on the impracticality of the US being drawn into another conflict. The Arms Control Association published a brief in November 2022 highlighting how the war in Ukraine has complicated the situation in Iran. <sup>27</sup> On the one hand, Russia's aggression towards its neighbor and use of nuclear threats throughout the conflict serve as powerful reminders of the importance of preventing another hostile state from acquiring such weapons. On the other, the US and its allies are in no position to become involved in another conflict due to the use of military force and interventionism in Iran. They argue that the US may need to pursue other diplomatic measures outside the complete framework of the JCPOA, but that even reviving certain provisions such as monitoring access might be able to partially stabilize the situation.

## **Proposed Policy Options:**

I propose that the policies I have covered in the literature review portion of my paper can be grouped into three thematic categories: [1] Diplomacy, [2] Deterrence, and [3] Eliminating Critical Nuclear Infrastructure. I also propose a fourth option primarily to contrast the status quo: [4] Nonintervention. In the remainder of this paper, I will identify the strengths and weaknesses of each policy category. Additionally, I will identify several relevant case studies that provide

<sup>&</sup>lt;sup>26</sup> Larison, D. (2023, March 31). Centrist DC think tank: US should threaten war, regime change in Iran. *Responsible Statecraft*. Retrieved from: <a href="https://responsiblestatecraft.org/2023/03/31/centrist-dc-think-tank-us-should-threaten-war-regime-change-in-iran/">https://responsiblestatecraft.org/2023/03/31/centrist-dc-think-tank-us-should-threaten-war-regime-change-in-iran/</a>

<sup>&</sup>lt;sup>27</sup> Arms Control Association. (2022, November 9). A "Plan B" to Address Iran's Accelerating Nuclear Program. *Arms Control Association*. Retrieved from: <a href="https://www.armscontrol.org/issue-briefs/2022-11/plan-b-irans-accelerating-nuclear-program?emci=317e71cf-5760-ed11-ade6-14cb6534a651&emdi=8834fc26-6f60-ed11-ade6

insight into the real-world application of each respective category and attempt to predict their likelihood of success if used in the present.

## [1] Diplomacy

The diplomatic approach to nonproliferation centers on either reviving the JCPOA or negotiating a deal that would achieve similar results. The original deal set limits on enrichment levels and the number of centrifuges that the regime would be able to operate. These requirements limited key aspects of Iran's nuclear program in order to prevent it from developing the capabilities necessary to produce nuclear weapons. In exchange for agreeing to these requirements, the regime received relief from sanctions that had seriously weakened its economy. The deal also required that Iran allow the IAEA to conduct routine nuclear facility and centrifuge inspections to ensure compliance. This robust monitoring framework was intended to assuage concerns of noncompliance and preserve the mutual trust needed for the deal to succeed in the long run.

The efficacy of the diplomatic approach has the most grounding in real-world scholarly analysis due to the success of the JCPOA, albeit limited. When the agreement was in place, the regime credibly committed to reducing its nuclear stockpile while ceasing enrichment operations.<sup>30</sup> The verification provisions of the agreement, carried out by IAEA monitoring, succeeded in providing credible assurance for the US and its allies while the sanction relief worked as an incentive for the regime to remain in compliance.<sup>31</sup> Furthermore, the agreement

<sup>&</sup>lt;sup>28</sup> Nikou, S. (2021, August 17). Timeline of Iran's Nuclear Activities. *United States Institute of Peace, The Iran Primer*. Retrieved from: <a href="https://iranprimer.usip.org/resource/timeline-irans-nuclear-activities">https://iranprimer.usip.org/resource/timeline-irans-nuclear-activities</a>

<sup>&</sup>lt;sup>29</sup> Nikou. 2021. Timeline of Iran's Nuclear Activities.

<sup>&</sup>lt;sup>30</sup> Nikou. 2021. Timeline of Iran's Nuclear Activities.

<sup>&</sup>lt;sup>31</sup> Nikou. 2021. Timeline of Iran's Nuclear Activities.

reduced the possibility of escalation by demonstrating that at the time, the US would rather negotiate with the regime than go to war. The agreement thus helped establish mutual trust between the involved parties, creating a potential platform to support the further normalization of relations in the future.

While the JCPOA's implementation demonstrated the advantages of diplomatic bargaining as a path to ensure nonproliferation, its collapse exposed the flaws of this approach. Agreements like the JCPOA rely a great deal on the credible long-term commitment of both parties involved. The Trump administration's withdrawal undid the trust that had been established by the JCPOA, damaging the perceived credibility of the US as a dependable negotiating partner in future negotiations.<sup>32</sup> It is important to note that the long-term success of any diplomatic solution must rely heavily on its sustainability. The JCPOA was successful in stalling Iran's progress, but when the agreement broke down, the regime almost immediately resumed its efforts.<sup>33</sup> It may be the case that diplomatic agreements will only ever ensure success in scenarios where there is a decent level of ideological consistency in state leadership over the years.

Though the Biden administration has demonstrated a strong desire to return to the negotiation table, it has failed to yield any significant progress <sup>34</sup>, a possible indicator that the present applicability of diplomacy is at best, limited. Because of the JCPOA's breakdown and shifts in the ideological and economic factors driving the regime's policy agenda, it is uncertain

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<sup>&</sup>lt;sup>32</sup> Hafezi, P. (2022, August 31). Iran seeks stronger U.S. guarantees for revival of 2015 nuclear deal. *Reuters*. Retrieved from: <a href="https://www.reuters.com/world/iran-seeks-stronger-us-guarantees-revival-2015-nuclear-deal-2022-08-31/">https://www.reuters.com/world/iran-seeks-stronger-us-guarantees-revival-2015-nuclear-deal-2022-08-31/</a>

<sup>&</sup>lt;sup>33</sup> Liechtenstein, S. (2023, February 28). UN report: Uranium particles enriched to 83.7% found in Iran. *AP News*. Retrieved from: <a href="https://apnews.com/article/iran-nuclear-uranium-enrichment-germany-israel-c9b3669a7721bd8929d465117c81b70f">https://apnews.com/article/iran-nuclear-uranium-enrichment-germany-israel-c9b3669a7721bd8929d465117c81b70f</a>

<sup>&</sup>lt;sup>34</sup> Magid, J. (2022, December 20). Video surfaces of Biden saying Iran nuclear deal is 'dead'; White House doesn't deny. *Times of Israel*. Retrieved from: <a href="https://www.timesofisrael.com/video-surfaces-of-biden-saying-iran-nuclear-deal-is-dead-white-house-doesnt-deny/">https://www.timesofisrael.com/video-surfaces-of-biden-saying-iran-nuclear-deal-is-dead-white-house-doesnt-deny/</a>

if the trust and desire necessary to negotiate a future agreement currently exist. Since the diplomatic approach has largely been the status quo of the President Biden' Iran policy since entering office, scholars can be reasonably confident that continuing this path will not contribute to further escalation. However, the administration's lack of success in reviving the nuclear deal also indicates that Iran is less likely to be willing to abandon its nuclear ambitions again. If the status quo continues, it is unclear it will yield any progress in undoing the diplomatic deterioration that occurred under the Trump administration.

### [2] Deterrence

The deterrence approach involves the use of both "hard" and "soft" strategies to raise the costs of Iran's nuclearization to a point where it would outweigh the benefits. Hard deterrence strategies involve military attacks on specific targets such as regime leadership figures and government facilities to signal that military force will be used to inflict greater costs if the nuclear program continues to advance toward weapons-grade enrichment and active arms development. The regime currently views nuclear arms as a means to deter the threats that it currently faces from its regional adversaries and the US. Demonstrating a willingness to respond to crossing "red lines" with force could increase the perceived credibility of the negative consequences of nuclearization that the regime would face.

Conversely, soft deterrent strategies use economic restrictions and loss of diplomatic prestige to discourage further nuclear advancement. Economic sanctions are a major aspect of soft deterrence strategies and have been used heavily by the US and the international community in response to Iran's nuclear program since 2003 when concerns about weaponization were first

raised.<sup>35</sup> Given that Iran relies heavily on oil exports to support its economy, it is particularly vulnerable to trade embargoes that limit its ability to access international markets.<sup>36</sup> Formal votes of condemnation and the closure of embassies are additional methods that are used to inflict blows on a state's reputation on the global stage. While these means tend to be less impactful to the overall security of the country when compared to sanctions, they nonetheless harm its ability to engage in diplomacy with other states. Both forms of soft deterrence can also have compounding long-term impacts by causing targeted states to become seen as unreliable partners for trade and foreign investment, thus limiting their future economic prospects.

Historically, soft deterrents have served as an important component of the US' overall nonproliferation strategy in Iran. As a result, there is a good amount of scholarly information on the efficacy of soft deterrence. When the JCPOA was being crafted by the Obama administration, its success largely hinged on using sanctions relief as an incentive for the regime to comply with enrichment limitations and monitoring.<sup>37</sup> The US and UN sanctions that had been in place before the deal had significantly weakened the state's domestic economy, potentially threatening the regime's long-term stability. Consequently, the regime was eventually compelled to suspend elements of its nuclear program in exchange for economic relief.

The role of soft deterrents in the creation of the JCPOA demonstrates that they have been at least partially successful in the past. However, their efficacy appears to have waned in recent years. While the Biden administration has offered relief from sanctions in exchange for a revived deal, Tehran has not been particularly eager to return to the negotiating table. The reasons for this

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Primer. Retrieved from: <a href="https://iranprimer.usip.org/resource/timeline-irans-nuclear-activities">https://iranprimer.usip.org/resource/timeline-irans-nuclear-activities</a>

<sup>&</sup>lt;sup>35</sup> Nikou, S. (2021, August 17). Timeline of Iran's Nuclear Activities. *United States Institute of Peace, The Iran Primer*. Retrieved from: https://iranprimer.usip.org/resource/timeline-irans-nuclear-activities

<sup>&</sup>lt;sup>36</sup> Gerstel, Dylan. Segal, Stephanie. 2018, November 5). The Economic Impact of Iran Sanctions. *Center for Strategic and International Studies*. Retrieved from: <a href="https://www.csis.org/analysis/economic-impact-iran-sanctions">https://www.csis.org/analysis/economic-impact-iran-sanctions</a>
<sup>37</sup> Nikou, S. (2021, August 17). Timeline of Iran's Nuclear Activities. *United States Institute of Peace, The Iran* 

are likely a combination of China's willingness to purchase Iranian oil exports despite US sanctions<sup>38</sup>, and the mutual distrust between the two states that was deepened by the US withdrawal from the JCPOA.<sup>39</sup>

There are substantially fewer cases to gather information on the use of hard deterrent strategies in Iran. However, the outcomes of the assassination of Qasem Soleimani in 2020 offer some insight into how the strategy might play out if employed more regularly in the future. The killing of the high-profile general was driven by the Trump administration's desire to pivot towards a "maximum pressure" approach that emphasized greater use of deterrents and military force. Though Tehran had been slowly backing away from some of its commitments since the US withdrawal from the JCPOA, it had still been in partial compliance prior to the attack. In the aftermath of Soleimani's death, Tehran announced that it would abandon all its commitments to enrichment limitations, effectively ending any possibility of non-US states sustaining the deal's framework.

In past cases like the assassination of Soleimani, the use of hard deterrence strategies produced the opposite of their intended results, escalating tensions, and drawing Tehran closer to weaponization. If the US were to pivot towards more hard deterrence methods through military force as some policy stakeholders and scholars have proposed, the regime would likely react in a

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<sup>&</sup>lt;sup>38</sup> Mohammed, Arshad. Irish, John. Landay, Jonathan. Hafezi, Parisa. 2023, May 5. Analysis: Smoldering Iran nuclear crisis risks catching fire. *Reuters*. Retrieved from: <a href="https://www.reuters.com/world/middle-east/smoldering-iran-nuclear-crisis-risks-catching-fire-2023-05-05/">https://www.reuters.com/world/middle-east/smoldering-iran-nuclear-crisis-risks-catching-fire-2023-05-05/</a>

<sup>&</sup>lt;sup>39</sup> Hafezi, P. (2022, August 31). Iran seeks stronger U.S. guarantees for revival of 2015 nuclear deal. *Reuters*. Retrieved from: <a href="https://www.reuters.com/world/iran-seeks-stronger-us-guarantees-revival-2015-nuclear-deal-2022-08-31/">https://www.reuters.com/world/iran-seeks-stronger-us-guarantees-revival-2015-nuclear-deal-2022-08-31/</a>

<sup>&</sup>lt;sup>40</sup> Nikou, S. (2021, August 17). Timeline of Iran's Nuclear Activities. *United States Institute of Peace, The Iran Primer*. Retrieved from: https://iranprimer.usip.org/resource/timeline-irans-nuclear-activities

<sup>&</sup>lt;sup>41</sup> Burman, Max. 2020, January 5. Iran pulling out of nuclear deal commitment after U.S. strike that killed Soleimani. *NBC News*. Retrieved from: <a href="https://www.nbcnews.com/news/world/iran-pulling-out-nuclear-deal-following-u-s-strike-killed-n1110636">https://www.nbcnews.com/news/world/iran-pulling-out-nuclear-deal-following-u-s-strike-killed-n1110636</a>

<sup>42</sup> Burman. 2020. Iran pulling out of nuclear deal commitment after U.S. strike that killed Soleimani.

way similar to its response to Soleimani's death. Today, Iran has the ability to rapidly procure a weapon and it is foreseeable that attempting to coerce the regime through hard deterrent force would subsequently compel it to cross the weaponization threshold to dissuade further attacks.

There is also the possibility that UN sanctions might be reimposed to deter the enrichment of material at the 90% level required to produce nuclear weapons, as Britain, France, and Germany have suggested. However, given that the regime appears less responsive to economic pressure now than it did in 2015, it is unclear whether this threat would succeed in halting further enrichment. The increasing willingness of states like China and Russia to subvert international norms (and the geopolitical interests of the US) would make this strategy particularly challenging. While it is far less likely that the regime would expedite weaponization in response to the threat of soft deterrents like the reimposition of UN sanctions, it may be able to simply avoid the worst impacts of such measures by continuing to conduct business with willing partners. For soft deterrents to work, major powers like China and Russia would likely have to endorse their use as well, which is something that appears particularly unlikely at present with the ongoing conflict in Ukraine.

### [3] Eliminating Critical Infrastructure

In contrast to hard deterrence, military force could also be used to prevent proliferation by eliminating the infrastructure necessary for the regime to further advance its nuclear program. Key targets include the centrifuges needed to enrich fissile material, stockpiles of weapons-grade material, and facilities used to produce and house warheads. If an attack successfully eliminates a

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<sup>&</sup>lt;sup>43</sup> Mohammed, Arshad. Irish, John. Landay, Jonathan. Hafezi, Parisa. 2023, May 5. Analysis: Smoldering Iran nuclear crisis risks catching fire. *Reuters*. Retrieved from: <a href="https://www.reuters.com/world/middle-east/smoldering-iran-nuclear-crisis-risks-catching-fire-2023-05-05/">https://www.reuters.com/world/middle-east/smoldering-iran-nuclear-crisis-risks-catching-fire-2023-05-05/</a>

majority of key components of the regime's nuclear program, it could set back its progress towards weaponization by years or even decades, ensuring nonproliferation in the short term and giving the US and its allies more time to develop long-term solutions.

While many proposed strategies to eliminate nuclear infrastructure involve the use of conventional air strikes, it is also possible that coordinated cyberattacks could play a role in achieving this goal. This was demonstrated by the Stuxnet computer virus attack which was developed by the US and Israel as an experimental cyber weapon. In 2010 the virus was used to destroy around 1,000 centrifuges at Iran's Natanz nuclear facility, around 20% of the country's total number of centrifuges.<sup>44</sup> Just how significantly the attack delayed the regime's nuclear progress is debated, but it is generally agreed that it did succeed to some degree.<sup>45</sup>

Because of the substantial progress that Iran has made in developing its nuclear capabilities since the US withdrawal from the JCPOA, it is difficult to determine to what degree attacks on infrastructure could prevent subsequent weaponization.<sup>46</sup> Furthermore, Iran has made a deliberate effort to move many of its critical nuclear facilities deep underground where they are far less vulnerable to an attack.<sup>47</sup> Recent reports have indicated that Iran is engaged in covert experimentation at undeclared sites and consequently, a targeted attack could easily fail due to limited available intelligence.<sup>48</sup> Because of this, some scholars are skeptical that military force

<sup>&</sup>lt;sup>44</sup> Kelly, Michael. 2013, November 20. The Stuxnet Attack On Iran's Nuclear Plant Was 'Far More Dangerous' Than Previously Thought. *Business Insider*. Retrieved from: <a href="https://www.businessinsider.com/stuxnet-was-far-more-dangerous-than-previous-thought-2013-11">https://www.businessinsider.com/stuxnet-was-far-more-dangerous-than-previous-thought-2013-11</a>

<sup>&</sup>lt;sup>45</sup> Sahimi, Muhammad. 2020, December 1. Iran's nuclear advances went on, even as its scientists were picked off, one by one. *Responsible Statecraft*. Retrieved from: <a href="https://responsiblestatecraft.org/2020/12/01/irans-nuclear-advances-went-on-even-as-its-scientists-were-picked-off-one-by-one/">https://responsiblestatecraft.org/2020/12/01/irans-nuclear-advances-went-on-even-as-its-scientists-were-picked-off-one-by-one/</a>

<sup>&</sup>lt;sup>46</sup> Divsallar, Abodalrasool. 2022, January 10. A military strike on Iran is the worst non-proliferation strategy. *Middle Eastern Institute*. Retrieved from: <a href="https://www.mei.edu/publications/military-strike-iran-worst-non-proliferation-strategy">https://www.mei.edu/publications/military-strike-iran-worst-non-proliferation-strategy</a>

<sup>&</sup>lt;sup>47</sup> Divsallar. 2022. A military strike on Iran is the worst non-proliferation strategy.

<sup>&</sup>lt;sup>48</sup> Albright, Burkhard, Faragasso, & Stricker. Analysis of IAEA Iran Verification and Monitoring Report - February 2023.

could actually succeed in an attempt to destroy critical nuclear infrastructure in one coordinated strike.<sup>49</sup>

If successful, destroying nuclear infrastructure would provide the most robust guarantee of nonproliferation in the short term. However, like strategies of hard deterrence, using force to destroy infrastructure also runs the risk of contributing to a scenario where Tehran decides to double down on weaponization. To avoid possible escalation, an attack on infrastructure would have to inflict a level of damage sufficient to make it impossible for the regime to pursue weaponization in response. Furthermore, the use of force would likely make the regime less willing to engage in diplomacy and would harden its hostile sentiments towards the US and its allies, making the use of alternative strategies far more difficult in the future. These tradeoffs and the uncertainty of success make the elimination of infrastructure approach a high-risk, high-reward option for securing nonproliferation goals.

## [4] Nonintervention

The option of nonintervention is seldom discussed by foreign policy stakeholders and scholars, but I believe it is worth considering, primarily to contrast the present status quo. While some critics of the status quo have argued that maintaining the administration's present course amounts to "allowing" Tehran to weaponize, there are scenarios where this option might be taken seriously. If the Biden administration determines that nonproliferation is a lost cause, it could simply opt to abandon the goal altogether and instead assume a noninterventionist stance on the issue.

<sup>&</sup>lt;sup>49</sup> Divsallar, Abodalrasool. 2022, January 10. A military strike on Iran is the worst non-proliferation strategy. *Middle Eastern Institute*. Retrieved from: <a href="https://www.mei.edu/publications/military-strike-iran-worst-non-proliferation-strategy">https://www.mei.edu/publications/military-strike-iran-worst-non-proliferation-strategy</a>

If this were to occur, the US would abandon its sanctions and other current deterrents in place while resolving to focus its diplomatic attention on other foreign policy challenges. In this scenario, Iran would face no repercussions from the US if it chose to enrich fissile material to the 90% weapons-grade threshold or complete the weaponization process by constructing a nuclear warhead. From the Tehran's perspective, this is likely the most preferable scenario. It could fully commit to becoming a nuclear state and greatly enhance its domestic security and power projection capabilities while avoiding restrictions on its economy, loss of international prestige, and military retaliation. Weaponization becomes an obviously rational decision for Tehran with much to gain and little to lose. In the long run, allowing Iran to nuclearize without consequence would also establish a precedent that would compel other states to consider pursuing their own nuclear aspirations. Consequently, the result of nonintervention would likely result in the highest level of nuclear proliferation.

While it is extremely unlikely that this approach would ever actually be implemented by the Biden administration, it helps demonstrate the ways that the current policies have helped maintain nonproliferation thus far. The status quo has failed to prevent Iran from advancing its nuclear capabilities, but it has nonetheless contributed to the regime's decision to avoid fully committing to weaponization. This helps highlight the fact that while the outcomes of the Biden administration's past efforts leave much to be desired, they haven't been completely unsuccessful.

# **Policy Prescription:**

Based on my analysis of the four policy options I have identified in my research, I argue that diplomacy is the most optimal approach to maintaining nonproliferation. The Biden

administration should continue with its current focus on negotiating a new nuclear deal like the JCPOA while refraining from approaches that utilize military force such as hard deterrence and eliminating nuclear infrastructure. Given how close Iran is to weaponization, avoiding any further escalation must take precedence over all other considerations. The regime's hesitancy to weaponize indicates that it currently anticipates the likely costs of weaponization would outweigh the benefits that it would receive. Therefore, it appears that merely having the ability to become a nuclear state may be enough to assuage the regime's security concerns at present.

The Biden administration must consider that any shift in policy may upset this balance. Once Iran crosses the threshold of possessing nuclear arms, I predict that it would be far more difficult to return to a state of nonproliferation. Therefore, no policy should be implemented if it would increase the perceived insecurity of the regime without simultaneously inhibiting its ability to weaponize. This effectively rules out any additional hard deterrence strategies. The consequences of the assassination of General Soleimani are a strong indicator that the regime will respond to the application of force with escalation rather than retreat.

The US might be able to increase its use of soft deterrence by working with allies to establish red lines that would trigger additional sanctions if crossed. However, the lack of international coordination due to Chinese and Russian subversion makes it unclear how effective these measures would be and therefore unreliable. The soft deterrents that are currently in place should be maintained, but the Biden administration should not prioritize expanding these strategies as its primary approach to future nonproliferation goals. These methods have been historically useful in their ability to incentivize diplomatic cooperation, but their efficacy in the present has diminished significantly.

In theory, the elimination of infrastructure appears to be viable because it would negate the regime's ability to weaponize, resolving the apparent escalation dilemma that comes with the use of hard deterrence. However, it is extremely unlikely that a coordinated attack could realistically eliminate the necessary amount of infrastructure to resolve this issue, at least based on public knowledge regarding US military capabilities in this context. Thus, I find that the elimination of infrastructure approach is subject to the same risks that make hard deterrence so difficult to justify. It amounts to a gamble that could backfire if unsuccessful.

The option of nonintervention is the least preferable of those available. The marginal benefit of being able to dedicate greater focus toward other foreign policy issues is vastly outweighed by the short-term risk of rapid proliferation in Iran and the possibility of more widespread proliferation in the long term. Yet envisioning a noninterventionist scenario, however improbable, helps clarify the importance of maintaining a set of policies designed to promote nonproliferation. From this perspective, it becomes apparent that without past diplomatic efforts, Iran would already have nuclear arms today. Even if nonproliferation in Iran ultimately fails, the ability of the international community to prolong Tehran's progress and inflict consequences is necessary to deter further proliferation in the future.

Based on the arguments outlined above, I determine that diplomacy remains the most optimal choice available. Though this approach has struggled to yield desired outcomes in recent years, it is the least likely to lead to escalation and has a proven ability to be effective -- as demonstrated by the JCPOA. Foreign policy stakeholders and scholars must temper their expectations to reflect the reality that Iran is currently on the brink of becoming a nuclear-capable state. At present, effective diplomacy may only be able to prevent weaponization.

Imagining a noninterventionist scenario helps exemplify why this is still a worthwhile goal. Even if all else fails, a future where weaponization never occurs is far preferable to one where it does.

By remaining at the negotiating table, the US will be able to ensure that it does not escalate the situation further, while signaling a desire to resolve conflict with the regime peacefully, thus pulling Iran away from the critical threshold of true weaponization. Over time, it may even be possible to establish a new iteration of the JCPOA that leads to more substantive progress to prevent further advancement. However, this scenario is not possible without first seeking to normalize relations and regain trust in the short term. In conclusion, the Biden administration is best slated to accomplish these goals by continuing to prioritize diplomacy as the primary focus of its Iranian nonproliferation policy.

#### **Conclusion:**

In this paper, I have assessed the policy options that I believe are most applicable to the present-day nuclear situation in Iran. However, there are undoubtedly some flaws in my research that may limit the overall applicability of my prescription. Most notably, the portion of my analysis that deals with military force is based on public knowledge and likely does not reflect the most thorough understanding of the US military's capabilities. It is plausible that classified information available to the Biden administration might change the costs and benefits calculus enough to warrant a different policy prescription than my recommendation. Similarly, unexpected developments in the foreseeable future could necessitate reconsideration to account for changing circumstances. Further inquiries into the options I have identified should consider the most recent information in order to account for these flaws as best as possible.

In addition to information accuracy and recency issues, greater considerations should be made for the behavior and motives of strategic partners such as Israel, Saudi Arabia, and our European allies. Much of my analysis assumes that these partners would generally act in accordance with US leadership, but reality is likely to be more complicated. This assumption was practical for this paper in that it allowed a more thorough assessment of the options I sought to analyze. However, future assessments should attempt to identify how each ally's perspective will respond to the administration's policy decisions. This would yield a more accurate understanding of the costs and benefits for each respective option.

Despite these flaws, I believe that I have provided a useful simplification and analysis of stakeholder input on Iranian nonproliferation policy. Through my work, I hope that I have provided a framework for future scholars to interpret the vast number of perspectives available on this subject. Ultimately, there will never be an absolute "right" answer to such complex challenges and any decision made will involve a certain level of risk. However, through objective inquiry, it may indeed be possible to identify solutions that have the best chance of securing ideal outcomes while minimizing future conflict and harm.

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