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RENAE BLACK, MAJORITY STAFF DIRECTOR SAM E. FOWLER, MAJORITY CHIEF COUNSEL

United States Senate

COMMITTEE ON ENERGY AND NATURAL RESOURCES

WASHINGTON, DC 20510-6150

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JUSTIN J. MEMMOTT, MINORITY STAFF DIRECTOR and MINORITY CHIEF COUNSEL

March 25, 2024

The Honorable Jennifer Granholm Secretary U.S. Department of Energy 1000 Independence Ave., SW Washington, D.C. 20585

Dear Secretary Granholm,

I am writing to express my deep concern about the ability of the Department of Energy's (DOE) research security apparatus to resist threats from the Chinese Communist Party (CCP). This concern is especially heightened due to the continuing expansion of DOE's leadership in federal research and development (R&D) for artificial intelligence (AI), an area the CCP actively seeks to dominate. In order to counter the CCP's relentless targeting of pioneering AI R&D within DOE, the Department must accomplish three critical tasks:

- remediate its chronic counterintelligence shortcomings and fully inform Congress of its progress in such efforts;
- cease active R&D sharing with official members of the CCP, as well as individuals and organizations under the control of the CCP; and
- fully fund the DOE Office of the Inspector General (DOE OIG)

It is essential for DOE to understand that broad congressional support for its expanded AI leadership hinges upon addressing these actions promptly and effectively.

Addressing DOE's Chronic Counterintelligence Shortcomings

As you are aware, I, along with several members of the U.S. Senate Select Committee on Intelligence, sent you a letter (attached) on November 21, 2023, detailing significant concerns about the state of counterintelligence within DOE and its National Laboratories. I remain particularly troubled by the abrupt reassignment of DOE's Director of Intelligence and Counterintelligence. Likewise, I continue to be troubled by a classified report by an outside contractor highlighting systemic counterintelligence flaws within DOE. By failing to provide adequate responses to the questions in our November 21st letter, DOE has dramatically slowed our efforts to gather information and fulfill our oversight duties. This is wholly unacceptable.

The recent indictment of Linwei Ding, a Chinese national and a former Google employee charged with stealing over 500 confidential files related to Google's AI efforts, underscores the clear and present danger posed by the CCP's efforts to obtain American AI secrets.¹ This case

¹ U.S. Charges Chinese National With Stealing AI Secrets From Google - WSJ

reinforces the critical need for DOE's enhanced protection of AI technologies to safeguard national security interests.

Decoupling from CCP Influence and Engagement

On March 4, 2024, I sent a letter (attached) expressing concerns about the DOE's offer of taxpayer-funded research to official members of the CCP, including at least one agent of the United Front Work Department. In response, DOE made the outlandish claim to news outlets that the sharing of research with these compromised individuals will not only continue but will enhance America's national security. According to a DOE spokesperson, "...department officials have and will continue to strategically engage with partners and competitors from across the globe to protect and promote American innovation...and strengthen our national security."

This eagerness to engage with the PRC via scientific collaboration clearly contradicts a recent report released by the National Science Foundation titled *Safeguarding the Research Enterprise*. A key finding of the report states, "recent efforts of the [PRC] to preferentially direct fundamental research toward military needs, and its decision to restrict the flow of information out of the country, may severely limit the benefits of collaborations with research organizations within the PRC."³

In the face of mounting threats posed by the CCP's pursuit of technological dominance in AI, DOE's active engagement with CCP-affiliated individuals and organizations is recklessly foolish. This engagement must cease immediately. It is a fact that AI companies in the People's Republic of China (PRC) overcome innovative shortfalls by using open-source American models to fill innovation gaps and stay competitive with the U.S. in the global AI race.⁴ Therefore, DOE must implement a robust vetting process for those wishing to access and work with DOE-created AI foundation models. It is crucial that those friendly to the CCP do not gain access.

Sufficiently Funding the DOE OIG

To ensure proper oversight of DOE's efforts to mitigate the CCP's theft of pioneering AI R&D, DOE must fully support the DOE IG's request to close the funding gap for the OIG.⁵ According to the IG, "With the current level of proposed [FY 2025] funding... the OIG's oversight would be a fraction of what it should be and would not include any oversight of many key areas...For these reasons, I must conclude that I am substantially inhibited from performing the duties of my office."⁶

² Barrasso Quizzes DOE on China Interactions - AIP.ORG

³ Safeguarding the Research Enterprise (nsf.gov)

⁴ <u>China's Rush to Dominate A.I. Comes With a Twist: It Depends on U.S. Technology - The New York Times</u> (nytimes.com)

⁵ DOE FY 2025 Budget Request Vol 2 (energy.gov)

⁶ Id.

Among these duties is oversight of "high risk areas," including "[t]heft of intellectual property and research impacting national security," as well as the "[n]ew and expanding artificial intelligence program."⁷ According to the IG:

The OIG is responsible for the audit and evaluation of the Department's unclassified systems. The Department has experienced substantial problems with cybersecurity...[I]t will become increasingly important to secure its systems from vulnerabilities that could result in the loss of billions of dollars' worth of innovative or sensitive technologies developed using taxpayer dollars.⁸

As U.S. officials, including FBI Director Christopher Wray, express grave concerns over PRC hacking and insider theft of AI secrets,⁹ it is essential that the DOE OIG has the resources to oversee the protection of DOE's pioneering AI R&D, particularly from adversarial nations like the PRC. The security of our nation's technological advancements and national interests must remain paramount.

I ask that you respond to this letter by April 8, 2024, detailing a plan of action for how DOE plans to address each of the three issues highlighted above. Additionally, you have not responded to me directly regarding my attached March 4, 2024 letter. I ask that you respond by April 1, 2024.

Sincerely,

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⁷ Id.

⁸ Id.

⁹ China Is Stealing AI Secrets to Turbocharge Spying, U.S. Says - WSJ

United States Senate

WASHINGTON, DC 20510

November 21, 2023

The Honorable Jennifer Granholm Secretary, U.S. Department of Energy 1000 Independence Ave., SW Washington, D.C. 20585

Dear Secretary Granholm,

We write seeking answers to urgent questions raised by a recent personnel decision within the Department of Energy (Department).

On Tuesday, October 17, we received word that Steven Black, the long-serving Director of the Office of Intelligence and Counterintelligence (DOE-IN) at the Department of Energy, was suddenly and without explanation reassigned. We are told he will be taking on a new role as "Senior Advisor" in the Department. We are also aware that a study conducted by an outside contractor, which the Department has had in its possession since April, outlines disturbing findings as to the state of counterintelligence across the Department, to include the national laboratories.

As you are well aware, the Department of Energy and the research it supports, especially at the national laboratories, is among the most important national security work undertaken by this country. The findings in the contractor study, which Congress requested, are deeply concerning. If Director Black presided over DOE-IN over a period of time in which there were serious shortcomings with regard to counterintelligence, he should not be reassigned to any office within the Department that has a national security mission. We request that you refrain from reassigning Director Black to any Department office until we have received answers to these questions.

We request immediate answers to the following questions:

- 1. Why was Director Black reassigned from the role he has held for 11 years? Did the findings outlined in the contractor study factor into your decision to reassign him?
- 2. In which part of the Department will he serve as "Senior Advisor"?
- 3. When were you made aware of the contractor study that was transmitted to DOE-IN on April 24? Do you agree with the findings in the study?

James E. Risch United States Senator

Sincerely,

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United States Senator

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Marco Rubio United States Senator

Susan M. Collins

Susan M. Collins United States Senator

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Tom Cotton United States Senator

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John Cornyn United States Senator

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Steve Daines United States Senator

Bill Cassidy, M.D.

Bill Cassidy, M.D. United States Senator

Jerry Moran

Jerry Moran United States Senator

James Lankford United States Senator

JOE MANCHIN III, West Virginia, Chairman PON WYDEN, Oregon MARIA CANTWELL, Washington BERINARD SANDERS, Vermont MARTIN HEINICH, New Mexico MAZIE K: HIRONO, Hawaii ANGUS S: KING, JIR, Maine CATHERINE CORTEZ MASTO, Newada JOHN W, HICKENLOOPER, Colorado ALEX PADILLA, California

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COMMITTEE ON ENERGY AND NATURAL RESOURCES WASHINGTON, DC 20510-6150 JOHN BARRASSO, Wyoming JAMES E, RISCH, Idaho MiKe LEF, Ulah STEVE DAINES, Montana LISA MURKOWSKI, Alaska JOHN HOEVEN, North Dakota BILL CASSIDY, Louislana CINDY HYDE-SMITH, Mississippi JOSH HAWLEY, Missouri

and MINORI TY CHIEF COUNSEL

JUSTIN J. MEMMOTT, MINORITY STAFF DIRECTOR

WWW.ENERGY.SENATE.GOV

March 4, 2024

The Honorable Jennifer Granholm Secretary U.S. Department of Energy 1000 Independence Ave., SW Washington, D.C. 20585

Dear Secretary Granholm,

I am writing to express my deep concerns regarding a series of meetings and exchanges between Department of Energy (DOE) officials and members of the Chinese Communist Party (CCP). I have learned that these meetings went beyond mere diplomatic courtesies. In some instances, they served as forums in which the taxpayer-funded research and development of our national labs was offered up for the benefit of Chinese state-owned enterprises (SOEs) and, by extension, the CCP.

The fact that DOE engaged in such misguided interactions, especially in light of the People's Republic of China's (PRC) persistent and pervasive theft of the United States' scientific and intellectual assets, is profoundly alarming. The apparent desire to keep these meetings shielded from the American public's scrutiny, with coverage found exclusively within Chinese media outlets, raises significant concerns about DOE's transparency and broader collaboration with the CCP.

Amid the PRC's escalating assertiveness in the world, DOE seems not just willing but eager to deepen tics, effectively rewarding its aggressive posture. This constitutes a clear and present danger to our nation's economic and national security. The following occurrences are only but a few of the troubling interactions between DOE and CCP officials that were uncovered by my staff.

<u>Meeting between Stephanie Duran, DOE's China Office Director, and Sun Ying, President</u> of the State-owned China Construction Technology Company (CCTC) - October 11, 2023, <u>Beijing, China</u>

On October 11, 2023, the Director of DOE's China Office, Stephanie Duran, together with additional staff from the U.S. Embassy in Beijing, met with Sun Ying (Figures 1-3),¹ President

of CCTC and an avid member of the CCP (Figure 4).² She is an awardee of the title of "Outstanding Communist Party Member of Central Enterprises [translated]."³

In this meeting, Ms. Duran stated she would support providing CCTC with the technical expertise of Lawrence Berkeley National Laboratory and other premier national laboratories in the United States. According to a translated readout from CCTC:

Stephanie Duran agreed with China Construction Technology Company's proposal to deepen cooperation. She introduced the relevant work of the U.S. Department of Energy in energy policy formulation, energy industry management, and technology research and development, and expressed that she would support Lawrence Berkeley and other U.S. national laboratories to carry out technical exchanges and cooperation with China Construction Technology Company in clean energy and carbon emission reduction [translated]...⁴

This commitment by Ms. Duran to align with CCTC's proposals for deepening U.S.-China cooperation raises serious concerns. It reveals a severe miscalculation by DOE of CCTC's actual intentions, which starkly contrast with the professed shared ambition of mitigating carbon emissions. DOE's miscalculation is further illuminated by Sun Ying's comments to the Chinese media, where she stated:

Over the years, [CCTC] has greatly improved its ability to serve the country's major development strategies through technological innovation. We have been thoroughly implementing the spirit of General Secretary Xi Jinping's important instructions on self-reliance and self-improvement in science and technology, and constantly enhance our historical awareness of serving national development with scientific and technological innovation [translated].⁵

<u>Visit to Zhengzhou University of Light Industry by Chao Ding, an Energy Technology</u> <u>Researcher at Lawrence Berkley National Laboratory – October 16, 2023, Zhengzhou,</u> <u>China</u>

On October 16, 2023, Chao Ding, a scientist from Lawrence Berkley National Laboratory, visited⁶ the School of Energy Power and Engineering at Zhengzhou University of Light Industry, a PRC university with a dedicated CCP support structure.⁷ The school's dean, Wu Xuehong,

⁵ 社长专访 | 中国建设科技集团总裁孙英:为建设世界一流科技型企业而奋斗 创新 发展 战略 (sohu.com)

⁶ 美国劳伦斯伯克利国家实验室丁超研究员来我院进行学术交流 (zzuli.edu.cn)

⁷ 党委概况 (zzuli.edu.cn)

² 社长专访 | 中国建设科技集团总裁孙英:为建设世界一流科技型企业而奋斗 创新 发展 战略 (sohu.com)

³ 副会长简介-孙英 - 中国房地产业协会官方网站 中房网 (fangchan.com)

⁴ 美国能源部中国办公室主任/美国驻华大使馆能源参赞杜采诗到访中国建科 - 集团要闻 - 中国建设科技集团 股份有限公司 (cctc.cn)

gave Ding a tour, during which Ding offered "opinions and suggestions on the construction and development [translated]" of a new laboratory at the university.⁸

Whether known or unknown to Mr. Ding, Wu Xuehong is an enthusiastic member of the CCP and sworn member of the college's support arm of the United Front Work Department (UFWD).⁹ After the 20th National Congress of the Communist Party of China, Wu Xuehong stated:

As a member of the college's United Front Work Committee and a scientific researcher, I will put into action the major decisions and arrangements made at the 20th National Congress of the Communist Party of China, deeply study and understand General Secretary Xi Jinping's important expositions on doing a good job in ethnic work and religious work, do a solid job in the college's united front work, and build a solid sense of the Chinese nation's community [translated].¹⁰

Chao Ding's interactions with Wu Xuehong are especially troubling in light of this statement. As China scholars have explained:

"UFWD coordinates the [CCP's] efforts to strengthen its influence and co-option of representatives of different parts of society, both domestically and internationally...Groups targeted by united front work range from...business leaders to Chinese diaspora communities and intellectuals...Co-opted individuals and groups can be mobilized [by the United Front] as needed for specific ends. Those ends include technology transfer."¹¹

As highlighted by the case of Chao Ding, DOE scientists are primary targets for the CCP. It is almost certain that the PRC is targeting a significant number of DOE experts for their specialized knowledge and technological insights.

<u>Meeting between Noah Deich, then DOE Deputy Assistant Secretary for Carbon</u> <u>Management, and Zhang Guangjun, the PRC's then Vice Minister of Science and</u> <u>Technology – November 13, 2023, Beijing, China</u>

On November 13, 2023, Noah Deich, then DOE Deputy Assistant Secretary for Carbon Management, and Zhang Guangjun, the PRC's then Vice Minister of Science and Technology, met in Beijing (Figure 6)¹² to discuss "relevant science and technology issues [translated]."¹³

Zhang Guangjun is not only a longstanding member of the Chinese Communist Party. Guangjun is also a member of the 14th Chinese People's Political Consultative Conference. Additionally, he

10 Id.

¹² 科技部副部长张广军会见美国能源部副助理部长诺亚·戴驰 -中华人民共和国科学技术部 (most.gov.cn) ¹³ Id.

⁸美国劳伦斯伯克利国家实验室丁超研究员来我院进行学术交流 (zzuli.edu.cn)

⁹ 能源与动力工程学院党委委员热议党的二十大 (zzuli.edu.cn)

¹¹ Alex Joske and Jeffey Stoff, "The United Front and Technology Transfer," Chapter 15, Hannas, Tatlow, eds., China's Quest for Foreign Technology: Beyond Espionage, Routledge, 2020.

served as Vice President of Beijing University of Aeronautics and Astronautics.¹⁴ As outside observers have stated, this university is one of the "Seven Sons" universities "that directly support[s] the country's defense research and industrial base and that operate[s] as [a] prime pathway[...] for harvesting US research and diverting it to military applications."¹⁵

Meeting between David Turk, Deputy Secretary of Energy, and PRC Officials to Launch the "Working Group on Enhancing Climate Action in the 2020s" – January 12, 2024

According to the WeChat account of the PRC's Ministry of Ecology and Environment, on January 12, 2024, U.S. officials, including Deputy Secretary Turk, and PRC officials kicked off the "Working Group on Enhancing Climate Action in the 2020s" via video link."¹⁶ According to *China Daily*, an English-language daily newspaper owned by the Central Propaganda Department of the Chinese Communist Party, "[t]he two sides agreed to maintain close communication, exchange experiences and deepen practical cooperation...in accordance with the consensus outlined in the Sunnylands Statement on Enhancing Cooperation to Address the Climate Crisis."¹⁷

According to this joint U.S.-China statement, "[t]he Working Group will carry out information exchanges on policies, measures, and technologies for controlling and reducing emissions, share their respective experiences, [and] identify and implement cooperative projects...¹⁸ With Deputy Secretary Turk's endorsement, instances of DOE-CCP engagement and exchange will not only continue but increase in scope and severity.

Despite what Biden Administration officials believe, it is increasingly clear that the CCP's true intent is not to walk hand-in-hand with the United States towards environmental stewardship. The PRC has brazenly wielded its climate "cooperation" as a tool to insidiously increase its soft power in the West while maintaining an autocratic, dictatorial regime at home. The CCP will undoubtedly siphon even more of America's technological and intellectual bounty under the guise of good-faith collaboration, just as it has been doing for decades.

On February 2, 2023, Deputy Secretary Turk claimed to the Senate Committee on Energy and Natural Resources that DOE was navigating the CCP threat to American technological development with an "eyes-wide-open" strategy. Yet, when it comes to the DOE's entanglements with the CCP, it's clear that "eyes-wide-open" translates to willful blindness. DOE is openly inviting the compromise of our nation's taxpayer-funded research, development, and technical expertise. This is a dangerous gamble with our future economic and national security that must end immediately.

https://www.hoover.org/sites/default/files/research/docs/tiffert_globalengagement_full_0818.pdf.

¹⁴ 张广军同志任华中科技大学党委书记 - 中华人民共和国教育部政府门户网站 (moe.gov.cn)

¹⁵ Tiffert, Stoff, Gamache, "Under the Radar: National Security Risk in US-China Scientific Collaboration," Global Engagement: Rethinking Risk in the Research Enterprise, 2020,

¹⁶ 中美气候行动工作组启动会顺利召开-中新网 (chinanews.com.cn)

¹⁷ Work group with US eyes climate plan - Chinadaily.com.cn

¹⁸ Sunnylands Statement on Enhancing Cooperation to Address the Climate Crisis - United States Department of State

I request that you provide detailed responses to the following questions, along with the relevant documentation, no later than March 18, 2024. Additionally, I am requesting that DOE provide my staff with a comprehensive briefing regarding its activities in mainland China. The urgency and severity of this matter cannot be overstated. I anticipate your prompt and comprehensive reply.

Sincerely, Barrasso John Barrasso, M.D. Itanking Member

Questions

- 1. Please provide a complete list of official trips taken by Department of Energy employees to the PRC since January 20, 2021.
 - a. Please include with each documented trip:
 - the name(s) of each DOE employee on the trip
 - where within DOE the employee is assigned
 - the nature of the trip
 - the name(s) of the authorizing official(s) who signed off on the trip
 - the names of the PRC citizens whom DOE employees interacted with in the course of official business
- 2. What, if any, national security/counterintelligence analysis is conducted before DOE officials are permitted to meet with officials of our greatest geopolitical rival on their own soil?
 - a. Does DOE consult with other intelligence community partners within the U.S. government before agreeing to such meetings?
 - If not, why not?
 - b. Was such analysis and consultation conducted in the case of any of the official trips listed in response to question 1 above?
 - If not, why not?
- 3. Do DOE officials undergo pre-trip security/counterintelligence training as well as a counterintelligence debriefing upon return?
 - a. If not, why not?
 - b. Was pre-trip security/counterintelligence training provided and a subsequent counterintelligence debriefing upon return administered in the case if any of the official trips listed in response to question 1 above?
 - If not, why not?
- 4. Please provide a comprehensive overview of the authorization process for such official trips taken to the PRC.
- 5. Please provide a complete list of agreements, whether formal or informal, that DOE officials have entered into with PRC officials, CCP members, or private citizens subsequent to such trips listed in response to question 1 above.
- 6. Despite a deluge of enthusiastic PRC media coverage of the meetings detailed in this letter, it appears DOE has made the conscious decision not to publicize these meetings to the American public.
 - a. Why?
 - b. Is the PRC's media coverage of these meetings inaccurate?
 - If so, please correct the record.

Figures

Figure 1. October 11, 2023 meeting between U.S. delegation and CCTC, a PRC state-owned enterprise.



Figure 2. Sun Ying, President of CCTC, left, and Stephanie Duran, Director of DOE's China Office, right.



Figure 3. U.S. delegation and CCTC cohort at CCTC headquarters in Beijing.



Figure 4. Sun Ying, CCTC's President and longtime CCP member.



Figure 5. Lawrence Berkley National Lab scientist, Chao Ding, touring CCP-affiliated university where he reportedly offered advice on the construction of a new laboratory.



Figure 6. Meeting between Noah Deich, then Deputy Assistant Secretary for Carbon Management, and the PRC's then Vice Minister of Science and Technology and Seven Sons affiliate, Zhang Guangjun

