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July 16, 2018

The Honorable Jeff Steinborn P.O. Box 562 Las Cruces, NM 88004 jeff.steinborn@nmlegis.gov

Subject: Second Meeting of the Radioactive and Hazardous Materials Committee

Dear Senator Steinborn:

News has reached me that you are holding a hearing on July 19, 2018 on several aspects surrounding the proposed interim used fuel storage facility, called HI-STORE CISF (consolidated interim storage facility), that our company is planning to build in southeastern New Mexico. We wholeheartedly endorse public consultation on matters of regional and national interest. We also firmly believe that a dispassionate exposition of the facts and materiality of our technology will alleviate your concerns and make you an intellectual ally of our program. Here are some facts for you to ponder regarding our storage technology being proposed for New Mexico:

HI-STORE will store used nuclear fuel in all-welded canisters in below ground vertical silos (or cavities) enclosed by 17.5-ton lids. The storage cavities are designed to withstand any punishment that nature can throw at them without yielding even a micro-gram of nuclear matter to the environment.

Think earthquakes: the storage system is designed to shrug off the strongest earthquake *ever* recorded on planet earth!

Think the strongest hurricanes, cyclones or typhoons ever recorded: the storage system would appreciate a debris clean-up but little else.

Think of tornados strong enough to lift and hurl cars at it: again, the outcome would be ditto; the storage system will merely need some clean up to restore cosmetics.

Think of any other natural catastrophe: the answer is the same.

In fact, this facility will withstand nature's wrath at a level of ferocity that will flatten virtually every above ground structure in the land. It is an impregnable fortress for holding stainless-steel canisters in *unconditionally safe storage units*. And the assertion of safety applies to acts of human mendacity as well: because the only access to the storage cavity is through the heavy top lid (which can be buttressed to withstand enormous loads), an aircraft crashing the facility will



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be an entirely unproductive act of sabotage for the perpetrator. A crashing aircraft would cause the plant personnel temporary inconvenience but would not result in lasting damage to the canister or release of radioactivity. Such is the inherent indestructibility built into HI-STORE!

Beyond safety, I ask you to examine the HI-STORE CISF as an industrial plant: it produces no pollution, it does not need any water, nor does it excrete any water or any chemical of any kind. It does not make any noise. No aquifers or ground water will be affected. And, the radiation dose at the plant's protected boundary will be a small fraction of the cosmic radiation that bathes the state every single day.

Our core objective in establishing the HI-STORE facility is to aggregate the canisters stored at 73 different sites around the country to one location that is *incomparably safe and secure and has the right climate (dry, arid and non-coastal)*. The new challenges of the 21st century demand that America consolidate and upgrade its used fuel storage to an unquestionably safe and impregnable configuration. It is a national imperative.

Another fact that you should know is how quickly the HI-STORE facility can be dismantled. In less than one work shift, any loaded canister can be extracted and loaded on a conveyance for off-site shipment! HI-STORE is truly an at-will storage shelter for canisters; it can be de-fueled without any environmental repercussion at any time.

I have learned that a tiny band of misinformed activists have descended on New Mexico to disrupt the project. This group does not have a stake in the economic well-being of the local people. They seem to be bent on spreading lies and innuendos and slaughtering the truth with impunity. Your hearing will give them a megaphone to make it into a circus. My fear is that thoughtful people armed with facts and truth will sit in stunned silence, as they have in prior meetings.

I ask that you give those who are knowledgeable about the safety and economic benefits of HI-STORE an opportunity to speak with you. You may consider inviting representatives from NGOs that have not been historically supportive of nuclear power, such as the Union of Concerned Scientists or the Sierra Club; to present their opinion to you. I respect their positions even when I disagree with them. You may also consider inviting university professors, researchers with expertise in the field of nuclear technology (of which New Mexico has many, thanks to the National Labs in the State) and local community leaders and municipal/county officials. Our society is rich in technically informed people. I advise you to summon them all for input.



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I have called our HI-STORE a national security imperative. It is also an economic imperative for southeast New Mexico because it will bring hundreds of millions of dollars in income to the region and create numerous well-paying jobs. The facility provides a sustainable revenue stream that is so important to the region and the state that are heavily dependent on fossil fuels for income. Those who stand in its way without credible science-based facts regarding its licensing and operation will be guilty of subverting New Mexico's economic growth and undermining our national security. Our international adversaries would be delighted to see the world's most technically advanced country unable to get its act together on a matter of great societal interest.

Sincerely,

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Dr. Kris P. Singh

Attachment: Short bio of Dr. Kris Singh

cc: See List Attached

Document ID: 5025-017



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CC:

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BIOGRAPHICAL PROFILE



Dr. Kris Singh President and CEO, Holtec International Singh Technology Campus 1 Holtec Blvd. / Camden, NJ 08104 Telephone: (856) 797-0900 Email: k.singh@holtec.com

Dr. Kris Singh is the Founder, President and CEO of Holtec International which he established in 1986 and nurtured its steady rise into a multi-national company with its business footprint in 18 countries on five continents.

Dr. Singh received his Ph.D. in Mechanical Engineering from the University of Pennsylvania, Philadelphia (1972), a M.S. in Engineering Mechanics also from Penn (1969), and a B.S. in Mechanical Engineering from BIT Sindri (Ranchi University), India (1967). Dr. Singh was elected to the National Academy of Engineering in 2013 for his seminal impact in the energy sector of mechanical engineering. He received Edison Foundation's "Thomas Alva Edison Award" in 2015 for his ecologically and environmentally impactful inventions. Rutgers University named him "South Jerseyan of the year – 2016" for his significant beneficial impact on the South Jersey region. In 2017, the National Academy of Inventers elected him a Fellow and the University City Science Center (Philadelphia) inducted him to its "Walk of Fame." Dr. Singh was named a Fellow of the American Society of Mechanical Engineers in 1987 for his numerous contributions to heat exchange technologies. He is a registered Professional Engineer in Pennsylvania (since 1974) and Michigan (since 1982) and a member of the American Nuclear Society (1979-present).

A widely-published author in scientific journals (some 70 technical papers, one textbook and numerous symposia volumes) and a prolific inventor (85 patents granted, many pending), Dr. Singh has led Holtec International since the company's inception, building it into a technological powerhouse respected for its engineered goods and services around the world with nine major operations centers in three countries. Over 120 nuclear plants around the world employ Holtec's systems and equipment many based on Dr. Singh's patents. In recent years, Dr. Singh has been leading Holtec in the global race to develop a "walk away safe" small modular reactor to make nuclear energy an economical green power alternative.

An intrepid entrepreneur and a socially conscious industrialist, Dr. Singh has built a \$310 million Technology Campus on the Delaware River in Camden, NJ to create much needed employment in one of America's poorest cities. Thanks to the steady stream of design innovations, Holtec is widely held to be pre-eminent in management of used nuclear fuel.

In his early career, Dr. Singh taught numerous graduate level and continuing education courses, published 70 technical papers, authored numerous books and monographs, and contributed to the creation of several national codes and standards for equipment and system design.

He is currently an Emeritus member of the University of Pennsylvania's board of Trustees, where he served from 2009-2017, and a member of the University's Board of Overseers for the School of Engineering and Applied Science (2005-present). In addition, he serves on the Board of the Nuclear Energy Institute (1998-present), and the Cooper Health System (2013-present). He is also a Director of the Washington, DC- based *Atlantic Council* and a member of the "National Investment Council" that advises the President of Ukraine. He chairs the KPS Foundation (2001-present), a charitable Singh family foundation whose signature contribution to the advancement of science is the completion of the "Krishna P. Singh Center for Nanotechnology" at the University of Pennsylvania in Philadelphia in 2013. The KPS Foundation is also active in improving child literacy and public sanitation in India.

CHAIRMAN Resource

From: Sent:	Erika Grandrimo <e.grandrimo@holtec.com> Monday, July 16, 2018 5:20 PM</e.grandrimo@holtec.com>
То:	Erika Grandrimo
Subject:	[External_Sender] July 19, 2018 - Second Meeting of the Radioactive and Hazardous Materials Committee
Attachments:	Singh Current one page bio.pdf; 5025-017 Steinborn Hearing Letter July 16 2018.pdf

Dear Senator Steinborn:

The attached correspondence is being sent to you on behalf of Dr. Kris Singh.

Best regards,

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