WATER IS LIFE
QUANTUM IS DEATH

IP address?

They know where I pee?

WATER~YES
TECH~NO!

Zine composed by Friends Against Quantum (FAQs)

Southside Chicago, December 2024

Defend the Sacred. Water is Life. Quantum is Death.

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Quantum Campus: the $9 billion Department of Defense testing ground coming to the South

The U.S. Department of Defense and the State of Illinois announced in July 2024 plans to build a $9,000,000,000 'quantum campus' at the former South Works steel mill site on the Southeast Side.

This quantum campus is a collaboration between the DOD, Pritzker, Brandon Johnson, and the Chicago Quantum Exchange (a group based at the University of Chicago and including local institutions UIC and Northwestern, Israeli universities Technion – Israel Institute of Technology and the Weizmann Institute of Science, as well as corporate partners Boeing, IBM,Microsoft, JP Morgan, and many more). Plans show a 128 acre campus, with potential to expand another 300 acres, directly on the lakefront and near the Calumet River.

It will house quantum technology companies attempting to create the first quantum computer, as well as the IL-DARPA (a research division of the DOD) Quantum Proving Ground, a space to 'prototype and test' quantum technology. This kind of work has immense energy and cooling needs, requiring a å of about -270 degrees Celsius (-450 degrees Farenheit) for the quantum technology it will house. Water from the lake and river will be used to cool the facility.

The first company to announce that it will be housed in this Illinois Quantum Park is PsyQuantum, a California start-up. PsiQuantum is receiving about $200 million in financial incentives like tax breaks, low-interest loans, and grants to come to the Quantum Park, and has announced that it will create about 150 jobs over five years. These jobs are primarily for people with PhDs in quantum physics, as well as jobs in engineering, software development, and technical lab work. Plans outline a 2025 construction start, and the facility becoming operational by 2027.

This shit is bad news. What will quantum computing bring?

1. The end of encryption.

Nothing will be encrypted anymore, expect for the DOD's data. Quantum computing is an urgent interest of the DOD because it has immediate military applications. Current encryption technologies rely on the fact that our computers are too slow to mathematically solve encryption. Quantum computers are much faster, and can break all of our current encryption forms. At the same time, quantum computers (and only quantum computers) can encrypt information in a truly unbreakable way. Only those with access to quantum computers will be able to encrypt information, meaning only the DOD and their subcontractors. PsiQuantum plans to build the world's first quantum computer in the Quantum campus. We know the DOD has been gathering encrypted data, waiting for quantum computers to become viable, so anything in the past that was encrypted will also be accessible by the DOD. Quantum start-ups like Bloch Quantum have already been working with the FBI in Chicago to get law enforcement ready to use quantum resources.

2. More accurate sensing, more accurate bombing. Quantum sensing is the other primary government interest - a new,

highly accurate form of sensing usable for geolocation, target tracking, and bombing, amongst many other things.

3. Unprecedented environmental impact. They claim this will be a carbon-neutral facility (which is definitely bullshit) - but their positioning of the facility by the lake almost certainly means they'll be pulling in and using lake and river water the help with the cooling of the facility. Quantum computers and other pieces of quantum technology need to be kept at -270 degrees Celsius (-450 degrees Farenheit), which requires immense amounts of energy, and water is used as a part of this cooling process. Traditional computing data centers generate toxic electronic waste, can draw an amount of power equivalent of that used by tens of thousands of homes. Like other types of computers, quantum computers rely on specific materials, including copper. Quantum will likely continue the legacy of exploitative and extractive material sourcing. At the end of the day, we have no idea what the environmental impact could be on the communities around the site or on the land - even to the DOD, this is just a 'testing ground'.

4. Jobs for the wealthy, displacement for the South Side. PsyQuantum, the first company to commit to housing their work at the campus, has promised only 150 jobs, all of which will be for people with specific doctoral qualifications already working or doing research in a computing or quantum field. In a highly technical and experimental, DOD funded facility, the likelihood of having any entry-level jobs is almost zero. Instead, the site will bring those scientists into South Chicago, pay them salaries significantly higher than the average salary of the area, and drive up the land costs around the facility. We all know how gentrification goes. With a decreased tax rate as a part of the incentive, the wealth generated by these companies will not be going to the community around them. Previous plans

for the former Steel Works site included public space, housing, community facilities, and all of those are taken away by this project. Brandon Johnson is also pulling $5 million from its housing and economic development bond to put towards the quantum site.

5. More police, more security, more violence. The world's first quantum computer, on a DOD facility, will absolutely bring a massive increase in police and security to the area. Silicon valley-esque tech companies, and their employees, will set up shop here, violently changing the shape and demographics of the neighborhood to fit the image of the new 'silicon valley of quantum' they're trying to create. The tech's primary audience is government, military, and law enforcement, and those are the people who will be working at this 'campus'. Silicon valley capitalists in partnership with the DOD, with billions on the line, will use those resources to keep their investments in the south side 'safe'.

What is quantum computing?

We already know where data that is large and complicated enough to require a quantum computer comes from, and what it's used for. Main uses would be encrypted data, machine learning and AI development, financial modeling (like investment and stock predictions), and satellite data, used for weather modeling but also in a military capacity for aircraft flight paths. Quantum computers can be used for any data intensive simulation, but quantum computing is in no way a benefit to the public. It's just a new billion dollar defense industry promising corporations more profit.

We don't want a DOD testing ground on the South Side. The city is keeping the project under wraps and relying on lack of technical knowledge to ignore people's concerns, so talk to your neighbors, ask if they've heard about it, share the info.

the average American household uses in a day, and Chat GPT more than 172 times that on the daily (The Obscene Energy Demands of A.I., New Yorker, March 2024), what can we expect from a computing technology that needs to be stored at temperatures colder than outer space??

The resource extraction required to not only build, but maintain some fantasy quantum cyberutopia is environmentally destructive, however they try to greenwash it. Even if this project is by some miracle emissions-neutral - and it won't be - it'll open the door to more ecologically-destructive infrastructure in the long run. All that it means is more trees on the medians of our streets while the third world--and the South Side's lakefront--will bear the cost of this project, gentrified or desertified by toxic dust and construction runoff.

To be clear, a system premised on this kind of truncated economic growth and technological 'progress' (increasingly-complex gadgets for the rich and their militaries) demands environmental devastation and the loss of life (right now and in the future). For many, the apocalypse is already here. The quantum campus is like a sparkling carrot being dangled in front of our eyes, or rather on our screens, so that we don't have to look in that direction for very long. This is why those profiting off this project want it to be built as fast as possible, beginning February 2025. It's not in their interest to submit environmental impact statements, or respond to neighborhood concerns about increasingly hypermilitarized police presence. Doing their due diligence would mean risking negative public opinion or delays in their project.

This is why there are so many articles discussing the ways the 'quantum revolution' is going to change ordinary peoples' lives and magically reverse

course on our presently uncertain future. It is only incidental that it is cracking open new markets for capital accumulation, expanding the policing power of the state and displacing poor Black and brown people in the process. As long as we only encounter the question on this level, where new technological miracles are presented as infinite antidote to generalized social and ecological decline, we remain trapped in the hypnotic reverie of tech-worship and consumption.

What this really points to is the contradictory character of society, and it gives us some clues about what would have to change to build one that wouldn't achieve what it does on the back of misery, dispossession and ecological catastrophe. Right now, what we need to survive (housing, food, basic necessities and everything else) is held by vanishingly few people, doled out and worked on not downstream of what we need, but what we can afford, and what makes capitalists richer. Appropriation of those necessities--making what we need free and holding it in common--is the only way out of this catastrophe. That begins with rematriation of land to Indigenous People and reparations for the descendants of enslaved and oppressed people, whose dispossession is foundational to the maintenance of American society and global capital.

Delaying their project would definitely hurt their bottom line, but if the pocket they're pulling from is the U.S. military and the likes of IBM, the supply of capital is essentially endless, and only expanding through partnerships with other settler colonies and neo-colonial projects. What we need is for the killer quantum campus not to be built. No one needs to breathe in the contaminated dust it'll kick up, spreading carcinogens throughout the South Side's lakefront.

FISH NOT BOMBS
NO QUANTUM KILLER CAMPUS ON THE SOUTH SIDE

The approval for rezoning and planned construction of the Illinois Quantum & Microelectronics Park was rushed through city council in early December with a shocking lack of transparency or public input. Most people are waking up to find out that this development was already approved and may begin as soon as February of 2025. Most people in Chicago don't know what a quantum computer is and are only being told it will create jobs and bring economic development to the South Side. The reality is, economic development funded by the military and The University of Chicago does not mean jobs for southsiders, it means displacement and gentrification.

Quantum computing is an entirely speculative field branded as the solution to the worlds energy problems and flooded with investment from all levels of government, military and finance sectors. While we can say things like "even the scientists don't know if it will work," the truth is that with enough DARPA money, it will work; people said the same thing about atomic weapons before the Manhattan Project. Actually, scientists and investors today happily refer to the quantum computer as the Next Manhattan Project, while still managing to obscure the fact that this is a weapon. Leaders in the industry are doing everything they can to control public opinion and reinforce the delusional claim that it will "offer new tools for solving global problems."

AI listens to you, and charts your activities in order to accumulate data to encourage your participation in the economy (in other words, to keep itself and the entire system functioning). Whatever way you look at it, this research facility is not only wedded to the military, but is enmeshed in the flows of global capital. The surveillance it'll bring - and the world that depends on it - requires immense resource extraction in the third world, and it'll rebound to make those neo-colonial partnerships and settler occupations more efficient, better policed, and harder to unseat by the people struggling there. What's happening in our backyard has global ramifications.

"How can the world reach net zero if it keeps inventing new ways to consume energy?"

We can see behind the intense greenwashing necessary to promote so-called "zero-emissions" projects such as this. The proliferation of funding and infrastructure for quantum research as for AI, data centers, electric vehicle battery plants, and microelectronics tech corridors all deftly serves the narrative that if we can just make it to the next breakthrough, all of our energy problems will be solved. While the solutions these technologies may provide remain negligible at best, even for cities of the Global North, the impact on a global scale is clear, and devastating.

"Countries of the Global North are responsible for more than two thirds of historical greenhouse gas emissions, but countries of the Global South are two to three times more vulnerable to the consequences of climate change." - A Call to Revolt

Forests keep burning, waters keep rising, and Global CO_2 emissions keep climbing (by 1 billion metric tons since last year, according to a report led by the University of Exeter in Britain). If a single bitcoin transaction consumes as much energy as

Who are the key players?

‡PsiQuantum, quantum company from California

‡Quantum Exchange, a bunch of universities and industry partners, housed at UChicago

‡Governor JB Pritzker

‡City of Chicago, especially Mayor Brandon Johnson

‡DARPA/Department of Defense

What's the projected timeline?

Projected early 2025: Construction starts

*early 2026: "Phase 1" construction complete (offices)

*late 2026: "Phase 1" workforce training programs have begun

*early 2027: "Phase 2" construction complete (the actual computer, including the cryogenic chamber)
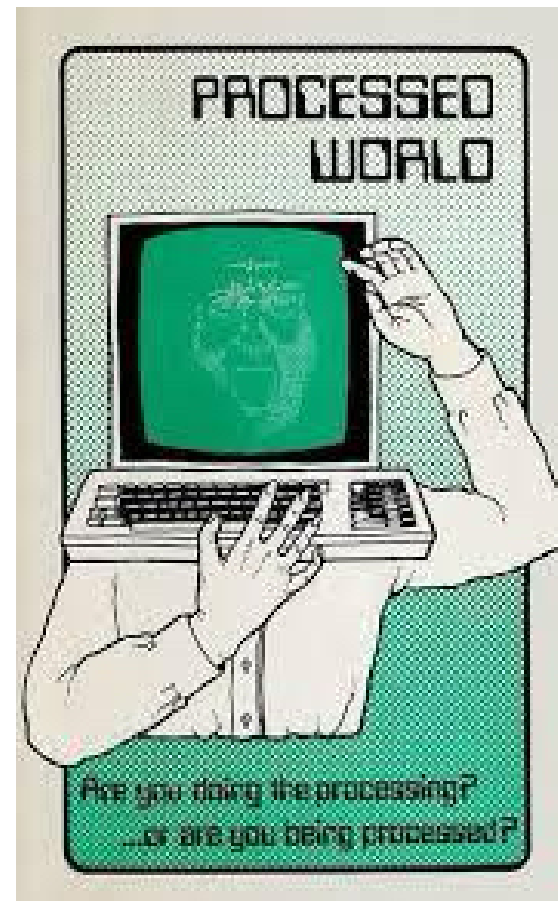
*late 2027: Complete and operating

Where is the site?

On the former U.S. Steel South Works site

Have info to share about the site?
email: noquantumcampus@proton.me

PROCESSED WORLD

Are you doing the processing?
...or are you being processed?

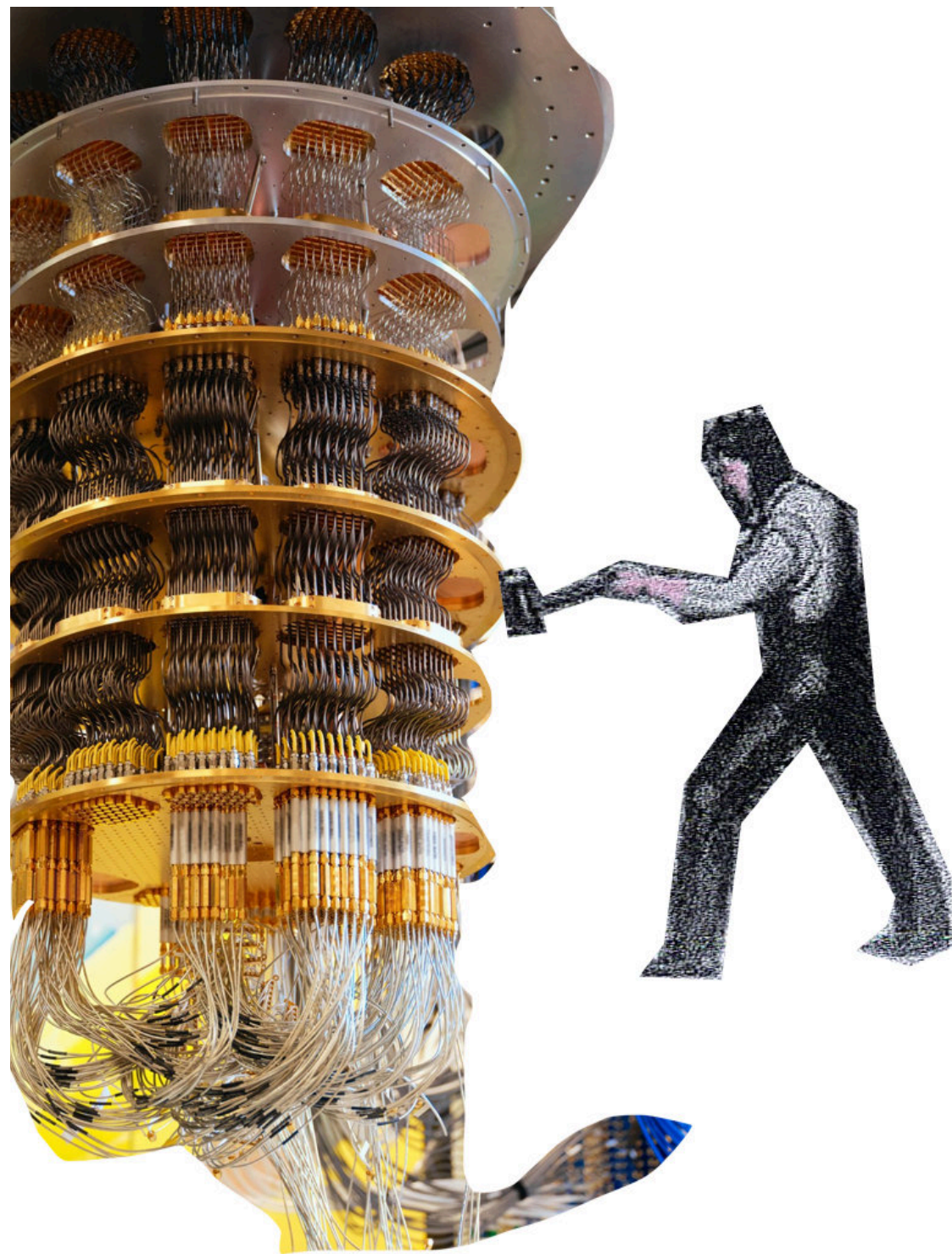# SLOW IT DOWN - BURN IT DOWN
STOP TECH CITY

The proposed quantum computing research campus at the Southworks site must never be built; it must be fought tooth & nail, with all we've got & all we can imagine. As bragged by governor Pritzker and mayor Johnson, this tech will be "history altering"- it will open doors to new dystopias, doors which once opened will prove difficult if not impossible to ever close. A tech race between nation states is already underway & this is a ground zero at the forefront of struggle against imperial technologies. Quantum computing will be used to improve AI military capability, increase mass surveillance & policing wherever possible. It will render all current forms of encryption obsolete, and functionally eliminate digital privacy (no more secrets). It will be used as a weapon in cyberwars & exponentially increase the digital divide. It will advance the consolidation of fake money into the hands of crypto-capitalists bros & their useless cryptocurrencies. This killer computer will consume staggering amounts of energy & accelerate the clock towards apocalyptic climate collapse.

Historical advances in state-backed technology have only ever increased the precariousness of life on earth. This machine will be used to target the opponents of U.S. imperialism in an ever increasing streamlined fashion. Quantum AI drones will create such an asymmetry in warfare that it will advance the speed & ease of genocides. Do we want something that makes it more effortless to kill, say, Palestinian children in our backyard? Do we want it taking the place of the warbler habitat? And while quantum will make war

effortless for us, that quantum "energy" had to come from somewhere. Energy for its 700,000 CPUs isn't going to be free, no matter how green they claim it to be.

City and state leaders want to establish Chicago & Illinois as the "Silicon Valley of quantum computing research." But is that really what the people want? The tech industry ravaged The Bay Area, spreading wealth inequality so thick you can taste it. Everyday people can no longer afford to thrive there. We already know that the people who will benefit from this project are not going to be the people of South Chicago. Instead, it will further militarize the South Chicago area & fill it up with too many cars. The 150 jobs they say will be created will go to specialists in the field from all over the country, in an eager competition.

Then there is Mishigami, Lake Michigan, the life of this place we call home. With the other Great Lakes together, it holds over 20% of the world's surface freshwater. She is already suffocated by urban sprawl, a long history of lakeside industry & poisoned daily with toxic sludge from the BP refinery in Whiting. Now they want to use her waters to cool their newest greenwashed death machine: the quantum processor needs to be kept at an extremely low temperature, 15 millikelvin (-273° C), in order to function. That's going to generate a lot of really warm water for those fish to swim in (but don't worry how warm the planet gets, as long as the computer stays cold enough to function). To put that into perspective, 15 millikelvin is colder

than interstellar space, equivalent to -450 degrees Fahrenheit, & not anywhere near a temperature that naturally occurs anywhere on Earth.

That DARPA (the research wing of the US. Military) is a major partner in this should give those who value life in the world every reason to oppose this project. Even if the stakes of this burgeoning technology are not entirely known yet, it is clear that it will only ever truly benefit the tech moguls who already rule many aspects of our lives. There will never be ANY benefit from technology like this to everyday people in Chicago or elsewhere on earth - past, present, or future. You may die in a heatwave, but the Quantum campus will always be cooled to -450F.

MEADOWLARKS AND SOUTHSIDERS AGAINST KILLER QUANTUM!

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SOME ARGUMENTS AGAINST THE ILLINOIS QUANTUM & MICROELECTRICS PARK, or QUANTUM CAMPUS

The Illinois Quantum and Microelectrics Park, or Quantum Campus, is being rushed through the normal processes for major development projects, which has allowed for important questions about the project to go unanswered.

The project was announced in late July of 2024, so while most of the city was busy preparing for the DNC less than a month away, PsiQuantum and its collaborators were working to start construction in Feb 2025. This rushed project timeline has not allowed neighborhood groups and individuals any time to respond to the project or raise any significant opposition.

There are still many unanswered questions and concerns regarding environmental impact, effects on the power grid, and water usage. City officials have essentially admitted that they lack answers on these impacts (Evans 2024). Illinois Quantum and Microelectronics Park told WTTW News, "There are virtually zero emissions from quantum computing, and the campus' cryogenic cooling facilities will have essentially zero emissions while using 100% carbon free electricity," (Wetli 2024). IQMP is making large claims to the public while not explaining how they will be able to cool their systems down to the near absolute zero required for quantum research. The scientific community is still debating how best to measure emissions and energy use from quantum computing (Chen 2023). We do know that current fastest super computers require a lot of energy.

For example, "the world's fastest supercomputer, Frontier, draws 8 megawatts when it idles — a quantity that could simultaneously power thousands of homes — and training a large language model one time generates about the same carbon emissions as passenger on a flight from New York City to San Francisco," (Chen 2023). It can't be concluded that a quantum computer will use more energy than a super computer but if it's anywhere close to Frontier, then it is a significant power draw that Chicagoans have reason to be concerned about.

We have yet to see an environmental impact statement so why are they trying to break ground already? Previous plans for Steelworkers Park, such as the 2017 New Southworks Project was scrapped due in part to the discovery of contaminants in the soil (Ori 2019) so what exactly has changed?

Looming environmental impacts aside, this development will bring increased militarization and could lead to gentrification. At community meetings in early December regarding the proposed project, South Chicago residents have expressed concern about seeing military vehicles and increased police presence in their neighborhood. Residents expressed concern that their neighborhood is already over-policed and believe that the development will make these conditions worse.

The large influx of federal and state dollars into this project could lead to displacement. Related Midwest, the project's real estate developer, is already researching the housing market around the site (Duncan 2024). Related Midwest claims to be interested in building "affordably priced housing" near the development (Duncan 2024). Affordably Priced housing practically means nothing without further specifications of how much the housing will cost compared to local median income or how it might impact neighboring property values. While the development promises 150 jobs (Duncan 2024), South Chicago residents most likely will not be qualified for these highly technical jobs. Only 20 percent of South Chicagoans have a bachelor's degree compared to the city wide rate of 42 percent (Maxwell 2024). So far, there are no plans to prevent displacement, not even a community benefits agreement attached to the project.

A major partner in the Quantum Campus is the Department of Defense's Defense Advanced Research Projects Agency (DARPA) ("Moving Quantum Computing From Hype to Prototype" 2024). This should give pause to every Chicagoan, why is the military developing on our lakefront? This would be the DOD's first quantum computer, part of the proposal is a "proving ground" to be constructed to test the feasibility of this experimental technology for military application. It needs to be said that this will accelerate the world deeper into a cyberwar arms race, compelling other countries to develop their own quantum-tech to defend against attacks and perform attacks themselves.

While the benefits of quantum computing for regular people are unclear, there are two clear aspirations in terms of military applications- decryption and drone warfare. Essentially what that would mean, should this project actually succeed in building a commercially viable quantum computer, is that the United States military would possess the means to decrypt any and all encrypted information- used by everyone from whistleblowers and journalists to international communications. Only the American Government would be able to use this computer, creating a power imbalance and potential for asymmetrical warfare like that of the first atom bomb. In fact, the movers and shakers of this whole project see this precisely as such, when director and CEO of the Illinois Quantum and Microelectronics Park, Harley Johnson, offers his view, "The potential for our work in the park to change the world is drawing comparisons to historic tech initiatives like the Manhattan Project or the development of Silicon Valley," (McCopin 2024). Those chilling comparisons call into question if we really need a quantum campus at all, if it will irreversibly usher the world into another unfathomably dangerous game of mutually-assured destruction.

When we look closer at any of the information we have about the Quantum Campus, it becomes clear just how many potential negative effects will come out of this new technology, with very few real benefits for south siders, much less the world. City officials and Quantum leaders are doing little to address concerns or secure real benefits as they rush through the community engagement process. We propose that the Quantum Campus not be built at all, anywhere in the world. The last thing humanity needs to deal with are the affects of yet another Manhattan Project.