

Making the

Right Choice

for Pickering's Waterfront

2.2 Million

Number of people living within 30 km

The Pickering Nuclear Station will end electricity production in December 2024 after 53 years of operation. Pickering is one of the world's oldest nuclear stations and is surrounded by more people, within 30 km, than any other nuclear plant in North America.





When the station closes, the community needs to make a choice:

Ensure the station is immediately dismantled in order to make most of its 600-acre waterfront site available for other uses (e.g., parks, housing, commercial development) by 2034.

Defer dismantling for 30 years and leave the site off limits until at least 2064.



Concept

Immediate

versus Deferred Dismantling

The International Atomic Energy Agency says that immediate dismantling is "the preferred decommissioning strategy" for nuclear plants. But instead, Ontario Power Generation (OPG) is proposing to defer the dismantling of the Pickering Nuclear Station for 30 years. OPG believes the dismantling will take approximately ten years, meaning the community will have to wait until 2064 for an opportunity to revitalize this prime waterfront site.

32,000

Number of person-years of direct and indirect employment resulting from dismantling

Why Not Here?

In Mississauga, the Lakeview
Village masterplan community
is being created on the site of what
was once the largest coal-fired power
plant in the world. A similar opportunity for
waterfront renewal could happen in Pickering.
Google: Lakeview Village Mississauga

Pros of Immediate Dismantling

It will permit most of the 600- acre waterfront site to be returned to the local community by 2034 for parkland, recreational facilities, dining, entertainment, housing and offices.

2 It will allow existing Pickering Nuclear Station workers, who know this one-of-a-kind station best, to be involved in its dismantling.

It will create 16,000 personyears of direct employment and more than 16,000 years of indirect employment between 2024 and 2034.

OPG already has more than enough funds to pay for the immediate dismantling of the Pickering Station.

Pros of Deferred Dismantling

It will permit OPG to defer its dismantling costs until after 2054.

Allowing some radioactive decay would reduce worker exposure to radiation. However, radioactivity levels within the plant will not be significantly lower in just 30 years. Thanks to progress in robotics and remote material handling, OPG can immediately dismantle Pickering while meeting all of Canada's worker protection safety standards.

Immediate dismantling is now happening in U.S.

All of these nuclear stations were dismantled immediately following shutdown. In all cases, the dismantling took less than ten years.

Elk River

Minnesota

Fort St. Vrain

Maine Yankee Maine

Haddam Neck Connecticut

> Shoreham New York

Dealing with Pickering's Spent

Nuclear Fuel

When the Pickering Nuclear Station closes, the total radioactivity of its spent nuclear fuel, which is stored on-site, will be more than 200 times greater than the total radiation released to the atmosphere by the Fukushima accident in 2011.

OPG is proposing to continue to store Pickering's spent nuclear fuel at the Pickering Nuclear Station site in six conventional commercial storage buildings until at least 2043. In the long-term, OPG is hoping that spent nuclear fuel can be transferred off-site to a deep geological storage facility, but no such facility currently exists or is even in the construction planning stage in Canada.

Alternatively, Pickering's spent nuclear fuel could be stored in above-ground, attack-resistant, reinforced-concrete vaults until an off-site facility is in-service. All vaults could be surrounded by a boundary structure consisting of a fire and attack resistant reinforced concrete wall and gravel-and-rock berms.

860,000

Number of spent nuclear fuel bundles stored on site by the end of 2024

11,984_{km}

The length of the spent fuel rods if laid end-to-end. They would circle Lake Ontario 10 times

Pros of Building Attack-Resistant, Above-Ground, Reinforced-Concrete Vaults

It would be much more secure with greater protection against deliberate attacks and would provide greater radioactivity containment in the result of leak, rupture or other incidents.

2 Construction of such a facility will create more good jobs in Pickering.

It can be fully paid for by OPG's spent nuclear fuel storage fund, which has a market value of \$9.9 billion.

The areas that will become available for revitalization

The nuclear spent fuel vaults could be located here

Waste storage landfill remains off-limits to new development

Pros of continuing to store highly radioactive waste in commercial storage buildings on the water's edge

Lower financial cost for OPG.

Let's make the right choice for the future of Pickering

For more information please visit

cleanairalliance.org/ dismantling-pickering



