

ELECTRICITY - ITALIAN STYLE

By Lauchlin Murray

Italy's geography, history, and politics make its electricity market different from America's. Consumers pay much more than any other European state. Consumption per capita is about a quarter of North America's, true. Yet, that is misleading given its size and the quantities of dollars involved.

Italy depends on outside sources for 10 to 15 per cent of its electricity. They are unable to effectively harness resources for hydroelectricity. Compared to Canada, Italy has an inverse relationship with fossil fuel and hydroelectricity. While many Canadians heat electrically, almost all Italians heat by gas, wood stoves, and fossil fuels. Italians are conservative with lighting and use less than Americans in public places and along highways. Another reason Italy avoids hydro is attributed to two dam bursts. One in 1963, killing 1,800 and another in 1985 killing 80 people.

Since 1987, Italy has had no in-country nuclear power production. A 1986 referendum soon after Chernobyl made Italy nuclear-free forever. Four nuclear plants have been under curiously slow dismantling.

In 2005, Italy's largest utility group ENEL decided to get around this by entering reactor construction projects with Electricité de France, EDF. Semi-privatized ENEL signed a memorandum of understanding assuring EDF they would take about an eighth of output from up to seven reactors being built on French soil. Last February, Italy left it's French counterparts behind, to finance and manage projects in Russia and Eastern Europe, and strengthened their Spanish and Dutch interests. France scrambled for new buyers.



Italy's urban areas pose difficulties when seeking right-of way access due to inadequate planning and public opinion.



Relatively few or modest security measures have been taken to protect Italy's distribution facilities from trespassers.

This development is difficult to evaluate. It is possibly a result of long negotiations between Russia and Italy on many energy related subjects. Maybe it is part of Italy's leftist government led by Romano Prodi, which took power from Silvio Berlusconi's right leaning government between the signing of that memorandum and ENEL's change of plans. Much of Italy's anti-nuclear movement is attributed to socialists and leftists. Whichever the causes, and despite an obvious desire for unification of services — utilities, military, transportation com-

munication — by the European Union, Italy wants things their way. Rome, Italy is hosting the 20th World Energy Congress in November. It is no coincidence that attendees will be a mix of financial institutions and energy suppliers.

Italians want it their way more than a civically minded North American market. They want better and cheaper electricity, but suffer from a severe NIMBY 'not in my backyard' complex.

Perceptions of health hazards from electricity towers cause citizens to turn out in droves to protest new installations near residential areas. Italy's concentration of populace and cramped territory demand projects be close to homes — there's no other way. Utilities, therefore, construct without public support.

In September 2003, an 18 hour blackout struck most of Italy. Supply from France was stopped by trees across lines in Switzerland. A report by five

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Italian Style

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European countries left Switzerland and Italy pointing fingers. Italy appealed to the European Union in Brussels for help. This influenced EU regulations requiring better security of transmission lines; but in fact, little has changed. New substations were built along Italy's northern borders; but implementation of laws are

handicapped by 'notwithstanding clauses' and delayed implementation dates. Different from North American markets, Italians must cope with a larger variety of governments, organizations, laws and standards.

There are pros and cons of Italy's entry into the EU. Massimo Motti, 38, is a partner in an electrical contracting firm in Northern Italy. Europe's conversion to a common currency came with a rapid rise in material prices he says. Another



Italy's primary electrical utility provider ENEL is converting traditional residential analog meters to digital ones.



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difficulty is Europe's attempt to unify standards. Motti is happy labour prices have gone down with the EU allowing workers to move cross-border more easily. He finds foreign trades provide the same quality as Italians at lower costs.

In Motti's home, which he is building, he considered alternative energy sources, such as Solar PV panels. He found it difficult that ENEL wanted him to turn over all he produced and buy it back. He thinks Italian energy suppliers have a mentality unsuited for implementing alternative energy programs. He wants Italy to reverse its commitment to stay nuclear free. He feels dangers have been exaggerated, and energy price increases will soon force Italians to reconsider anyhow.

Massimo Giacon, 36, an electronics engineer finds it odd that nuclear plants exist in other European states, but not in Italy. Giacon understands that a major part of ENEL's energy is bought from outside of Italy and he wants this to change because it is bad for Italy's economy. He thinks Italians will wait until the last minute when they have exhausted other sources of energy to switch over. He repeats that Italy has no clear plans for its energy future. He believes Italians will shy away from residential solar-power due to high costs of installation and maintenance, and that Italians will look to the United States for alternatives when a crisis has arrived.

Both Massimos noted electricity use is higher in their more industrialized north. Italian industry is moving to countries offering cheaper costs, like China and former Soviet bloc regions; yet, Italy's annual consumption is creeping toward 300 terawatts.

From a less global perspective, in Italy, using electricity in one's home is

less straightforward than in North America. Outlets provide 220 to 230 Volts. In many homes you find shoeboxes of adaptors for plugs. There are too many standards organizations setup to protect Italian producers. Wiring often pre-dates the First World War, is sloppy, has cut-corner installation, and is sometimes under-the-table work performed without proper inspection. Wiring is installed in solid concrete walls that require days or weeks of jack-hammering on typical residential projects. It is much slower than the hollow-wall construction in North America. There are similarities of course, but one has to pause.

In a macro or micro sense, Italy's electrical market is closed, with Italy selling management methods abroad. Unable to generate new energy markets internally – they make-up by telling others 'how to'. It leaves one wondering what exactly it is they are selling outside of their borders, when they are operating with deficits.



No Italian home is complete without a myriad of adapters to match various post-war products and installations.

Lauchlin Murray has had over 25 years of experience in construction engineering

and management in North America and on several international projects. He has had almost 10 years of experience

observing Italy's construction and marketplace first-hand.





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