

T R A N S I T T A L K

VOL. 24

Oil Giant turns to Electric Transit Saudi Arabia to introduce Trolleybuses

Together with its Spanish partner SICE, German manufacturer VISEON Bus announced recently that it had received an order to supply electric trolleybuses and infrastructure for a new trolleybus system to be built in the City of Riyadh, Saudi Arabia.

Riyadh, which means "the gardens" in Arabic, is the capital of Saudi Arabia. Located in the Central Province, it is home to over 4 million people.

The future-oriented electric bus system is a significant move toward non-petroleum based technologies in a country that has been a leading supplier of oil for more than 40 years. The introduction of electric trolleybuses was first conceived three years ago as part of a vision for the future, which included an overhaul (continued on p. 2)

Montreal Bus Fleet to go all-Electric by 2025

The city of Montreal has announced plans to convert its entire fleet of diesel-powered buses to electricity by 2025. The move would make Montreal the first North American city to have an all electric bus fleet – a landmark move in tackling world issues such as peak oil, pollution and climate change and reducing urban noise levels.

380 diesel buses presently on order will be the last of their kind, says Carl Desrosiers, chief of operations for the STM. "Last year we used 45 million litres of diesel," Desrosiers said. "My dream is that in 2025 we will use zero. That's a lot less greenhouse gases emitted. Around the world everyone's heading toward electric buses."

As of 2012, all of STM's bus orders will consider only hybrid or pure electric vehicles, with the hybrids gradually giving way to pure electrics. Modern electric trolleybuses, as in use in Vancouver, will soon (con't p. 2)



Viseon's design of an electric trolleybus for Riyadh, Saudi Arabia [Viseon GmbH]

Transit Award honors Llew Lawrence

With its annual *Gerry Wright Better Transit Award* presented April 24th, local advocacy group Citizens for Better Transit recognized Mr. Llewellyn (Llew) A. Lawrence, former Director of Marketing and Director of Operations of the *Edmonton Transit System*.

Born 1929 in Hertfordshire, England, Lawrence accepted a position (con't p. 2)

Montreal goes Electric (con't from p. 1)

be seen on test in Montreal. The plan envisions these vehicles will provide the mainstay of service on the busiest routes such as Pie IX Blvd., Henri Bourassa Blvd., Saint-Michel Blvd. and Notre Dame St.

Less busy routes are expected to employ so-called "fast charge buses". These are a new technology that is extremely promising, explains Desrosiers. The buses would recharge at intervals along their route at special charging stations. They would take on a charge that would enable them to travel to the next charging station.

The move toward electricity as the main fuel source, as opposed to diesel, biodiesel or natural gas, is both economical and ecological, Desrosiers said, and the STM hopes it will entice more people to use the public transit system.

[Sources: Green Auto Blog, May 24, 2010; Montreal Gazette, May 22, 2010]



Manufacturer Viseon says the trolleybuses for the Saudi capital will be 19.5 m long, have a capacity of 120 people, and feature a tapered front. [Viseon GmbH]

Oil Giant Saudi Arabia to get Electric Trolleys

(con't from p. 1)

of the nation's transportation systems to incorporate advancements seen in some of the world's largest cities.

The single-line trolleybus system will provide transit service to the new campus of King Saud University and initially use twelve articulated electric trolleybuses of a new futuristic design pioneered by VISEON. The use of trolleybuses will enable the creation of an emission-free transport zone on the campus, which covers some five square kilometers. The trolleybuses will run on their own right-of-way, with priority control at intersections.

Partner SICE (Sociedad Ibérica de Construcciones Eléctricas, S.A.) has been contracted to erect the infrastructure, such as the trolley overhead wire network and electrical supply system. In 2007, SICE installed a trolleybus system in Barquisimeto, Venezuela, in cooperation with NEOPLAN Bus GmbH, VISEON's predecessor.

Delivery of the new trolleybuses is anticipated by the end of 2011.

[Sources: Transport Weekly, March 22, 2010; International Trolleybus News (R. C. DeArmond), March 22, 2010]

Llew Lawrence honored (con't from p. 1)

as a transit operator with ETS after moving to Canada. He quickly rose through the ranks to inspector, dispatcher and garage superintendent.

When the Rapid Transit Project was set up under D.L. MacDonald, Lawrence worked with Prof. John Bakker and Walter Mitchell on its organization. He produced a groundbreaking position paper outlining the important role transit had to play in making Edmonton a more liveable city. Lawrence portrayed transit as an investment in moving people rather than in moving private vehicles. Out of this came the ETS Marketing section of which Lawrence became director.

Lawrence was a "people person". He was known and admired by all who knew him--from City commissioners to the new recruits in the garages and offices. His greatest concern was for the transit customer. Lawrence believed in public consultation. In revamping the transit system for the future, Lawrence set about route changes with a series of public meetings throughout the city. He presented the department's ideas, requested and recorded citizen comment. He earned a reputation for transit as the one City department that listened to its customers' concerns.

Lawrence was later appointed as Director of Operations. He retired in 1988, and sadly passed away in 1992. However, the concept of marketing public transit, the role he set for transit as a "people mover" and the steps he took to involve citizens are still evident in the way Edmonton Transit operates today. Llew Lawrence is fondly remembered by those who worked for and with him for the betterment of the City of Edmonton and its transit system. [Submitted by: Citizens for Better Transit]

Edmonton LRT Expands

Crowds exceed Projections on Latest Extension

On April 24th, anxious citizens waited outside a locked gate, as officials prepared to open the latest extension on Edmonton's LRT line, bringing electric light rail service to the redeveloped Heritage Mall site, now known as Century Park. With much fanfare, the trains began providing service over a 5.4 km section of new track from South Campus via Southgate Shopping Centre. It is the last section of a \$690 million dollar plan that began with an expansion from University to Health Sciences Station nearly a decade ago. The extension brings the total length of the city's LRT line to 20 kms.

The extension to Century Park is already proving more popular than expected. Rush hour commuters waiting on platforms have reportedly been passed up by two full trains in a row in recent weeks. ETS projects that at peak times next fall, cars could operate 10 per cent over the capacity for which they were designed when post-secondary institutions are again in session. Operating trains every 4 1/2 minutes instead of five minutes during peak hours is a proposal being considered to help deal with the crowds, but the plan will require testing to examine its impact on vehicle traffic at LRT crossings. Signal problems led to traffic jams at 51st Avenue when the LRT extension opened in April. Future electrical system upgrades will also allow four car trains to operate during peak periods as well, creating more capacity. Presently many trains consist of only three cars.

A June announcement by the provincial government of \$800 million in Green Trip Funds for each of Edmonton and Calgary will mean 10 more LRT cars can be purchased, as well as a start to work on the NAIT LRT line, envisioned for completion by 2014. Funding will be allocated by the Province on a "paid on progress" basis, with the goal of reducing the number of vehicles on Alberta roads.

[Information Sources: Edmonton Journal, June 16, 2010; June 22, 2010]



Anxious Edmontonians jostle on the platform at Century Park to board the some of the first LRT departures to Clareview on Opening Day, April 24, 2010. [Photo: A. Wong]

Canada's No. 1 Trolley Driver Retires

Vancouver's Angus McIntyre celebrates 41 years of service

After 41 years behind the wheel of Vancouver's trolleybuses and carrying some 2.5 million passengers safely to their destinations, veteran transit operator Angus McIntyre stepped into retirement on May 31st.

McIntyre, an avid transit supporter and historian, is well known to people not only in North America, but around the world. Always ready with a smile and an anecdote, and ever knowledgeable and proud of Vancouver and its transit system, McIntyre was a true credit to his profession. Over 100 well-wishers, both locals and visitors from cities across Canada and the United States, came to usher him into retirement by taking part in a specially organized "last run" aboard two vintage Vancouver trolleybuses which followed McIntyre's regular weekday Route 7 run.

McIntyre began his career in 1969 aboard CCF Brill trolleys that had come out of the factory in Fort William (now Thunder Bay), Ontario in the late 1940's and early 50's. He has seen many changes in his long career, from the names of the transit operating companies—there have been at least six—to the vehicles, the routes and last but not least, passenger attitudes. McIntyre recalls that the vehicles he trained on back in 1969 even lacked right hand mirrors.

McIntyre's last official run was actually May 30th, where he drove one of Vancouver's new state-of-the-art low floor articulated trolleybuses on Route 3/20. McIntyre always preferred the vibration-free hum of the electrics to the rattle and roar of their diesel counterparts and has been a 'regular' on a number of Vancouver trolley routes such as the Powell Street and Stanley Park services.

The "special" runs on May 31st included a stop at Nanaimo SkyTrain Station where McIntyre's vintage trolley was met by a band as he pulled into the loop. He was presented with a plaque shaped like a bus stop sign that read "Angus McIntyre – 41". McIntyre said he will miss his job and many of his passengers, but that he could not have wished for a better send-off. He will continue his volunteer work with the Transit Museum Society TRAMS.

Happy Retirement Angus!



Top: Last official day on the job, May 30th, aboard CMBC articulated trolleybus 2563. Centre: A celebration at Nanaimo Station. Bottom: McIntyre drives a historic 1954 Brill trolleybus behind his regular weekday run on May 31st. [Photos: Dennis Tsang]

Our Editorial

LET'S REPAIR TRANSIT ECONOMICS



It was so good to hear that, at last, Edmonton is going to try to catch up on the lost opportunities to expand LRT. Compared with the 1980's, when expansion plans were first put in place, costs have risen beyond all reason as competition in the rolling stock market-- both bus and tram--is down to a few mainly off-shore controlled firms. We have lost all our knowledgeable people to retirement and left ourselves in the hands of unscrupulous consultants. Clearly in the present *laissez-faire* political milieu, the public deserves better management of its finances.

Public transit is to the City, a "Common Good" owned by its citizens. It is infrastructure and, as such, should be treated as inviolable, never to be disposed of in other than exceptional circumstances without a consensus, at least in City Council.

If we look back to the 19th century when streetcar systems were being built in every progressive city, the responsible authorities did not consider them to have a "shelf-life", but thought of them as permanent. Maintenance regimes in the best-run properties were designed to restore, as far as possible, the various components to "as-new" condition as they wore; local workshops performed most of the repairs, to the extent, in many cases, of building complete vehicles when one was destroyed by fire or accident, or operations required a different body configuration. Only with the advent of the disposable automobile came the reliance on one-source spare parts and the constant change of cosmetic design. At the start, the cost of borrowing for construction, for maintenance, and for renewal were budgeted as a continuing expense, and fares accrued to the transit account, the money not immediately expended being invested against future expansion and inflation. Unfortunately, such more or less liquid assets were too easily appropriated for other purposes, and the transit systems thus deprived, became a burden instead of being self-supporting, leading to the scrapping of their neglected infrastructure of rails and wires and the adoption of the motor bus whose track was built and maintained, and deficits covered, by the public purse.

Perhaps we should go back to the old-style economics of placing effective legal barriers to protect infrastructure and public investment.

Newcastle rejects Hybrid Buses

Newcastle bus bosses announced that Quaylink transit service will continue for another five years, but the flagship hybrid buses will be dropped because they are struggling with their hilly route.

The hybrid buses have been dogged by mechanical problems since their inception and found it difficult to cope with steep hills on Dean Street and around the Gateshead quayside. "Go North East", which will take over the running of Quaylink from Stagecoach next month, says it plans to replace them with ordinary diesel buses.

The hybrid-operated route, linking Newcastle and Gateshead with the Sage Gateshead, Baltic, Gateshead College, Ouseburn and St Peter's Basin, was hailed as an eco-friendly revolution when launched. But when transport operator Nexus recently put the route contract out to tender, it stated bidders must provide new vehicles.

Diesel buses will take over the route on July 18. Councillor Henri Murison, Newcastle's opposition environment spokesman said: "The [hybrid] buses were brought in at very high cost and they were announced with great fanfare. I think taxpayers would be very upset to think that money has been wasted."

[Source: Evening Chronicle News, June 6, 2010]

Winnipeg Looks at Streetcars instead of Bus Rapid Transit

The City of Winnipeg's investigation of light-rail technology involves a flexible streetcar that can negotiate downtown streets and also travel up to 80 kilometres per hour on dedicated transitways, according to an announcement by Winnipeg's Mayor Katz and the city's public works director Brad Sacher.

Variations of the electric-powered streetcars are made by Montreal manufacturer Bombardier, Siemens in Mississauga and Inekon in Czech Republic. They are used in Portland and Seattle and are heading to Toronto, which awarded Bombardier a contract to supply 204 of them for \$1.2 billion in 2009. The vehicle also appeared on a demonstration line in Vancouver during the recent Olympic Games in that city.

Winnipeg is in the midst of completing the \$138-million first phase of the Southwest Rapid Transit Corridor, which runs from The Forks to Jubilee Avenue, as a busway. In February, Katz announced his intention to place Phase Two, a \$210-million extension that would continue to the University of Manitoba, on hold pending an investigation of light rail technologies.

Council's decision to spend \$100,000 studying new light-rail technologies this spring angered bus rapid transit proponents on council, who wish to see a BRT system completed quickly. But Katz said the city received new information about light-rail technology whose infrastructure only costs \$50 million per kilometer. This would be far cheaper than previous estimates -- and only 32 per cent more expensive than bus rapid transit.

"We're now looking at LRT," Katz said Friday in an interview, adding consulting firms the city has hired -- Dillon and HDR -- have confirmed streetcar infrastructure would only cost \$50 million per kilometre. "This shows all three levels of government we can do something other than BRT (Bus Rapid Transit) with the money we've been talking about."

The mayor said the Manitoba Provincial Government -- not Ottawa -- has resisted upgrading bus rapid transit to light rail. Katz said he hopes he can convince the province that new streetcar technology is viable once city staff complete a report about the streetcars.

The flexible streetcar has a smaller turning radius than a conventional train, allowing it to operate in mixed traffic, Sacher said. Aside from the installation of tracks, additional costs associated with the technology include a storage and maintenance space for the vehicles as well as overhead lines to power them.

Streetcars ran on rails in Winnipeg until 1955, to be replaced by a large electric trolleybus system. The trolley system was closed in 1970 following a trend of the day toward diesel buses, a move now largely regarded as a mistake. There have been three unsuccessful attempts to resurrect electric trolleybuses in Winnipeg.

Consulting firm HDR concluded in a report that both bus rapid transit and light rail transit offer Winnipeg clear financial benefits. HDR's cost-benefit analysis concluded LRT would spark more transit-oriented development. The HDR report also rejected "automated people-mover" technology or PRT, briefly considered by the city in 2009, as unproven.

[Winnipeg Free Press, June 8, 2010]

Streetcars – An American Success Story

Tucson, Seattle, Washington DC, Atlanta, Sacramento, Fort Lauderdale, New Orleans, Columbus, Providence, Fort Worth and Salt Lake City are just a few of some 40 communities planning or building streetcar lines. Experts say up to 22 cities could have lines under construction within two years because of changes made by the Obama Administration. Last year, the US Department of Transportation and the Federal Transit Administration (FTA) reversed funding policies that favored bus rapid transit, making it easier to build streetcar lines.

Last June, the FTA decided to evaluate applications on the basis not only of cost-effectiveness (as judged by how much travel time is saved) but also the land uses that the transit project would support and the economic development the project would bring about. Approximately equal weight would be given to each of the three factors.

In December, DOT announced it would make grants of up to \$25 million for "urban circulator systems such as streetcars and rubber-tired trolleys." It noted these systems foster "the redevelopment of urban spaces into walkable mixed use, high density environments." Then, in January, DOT also rescinded a Bush policy that favored long-distance modes of transit.

Portland is one city planning to build on its successes. Its modern streetcars run on an eight mile loop from Legacy Good Samaritan Hospital, through the Pearl District, downtown, and Portland State University to the new South Waterfront District. The cars run about every 12 minutes, and ridership is nearly four million annually. Portland funded the original \$103.2 million line in part with a hike in parking fees and new property taxes created by surrounding development. Additional money came from city and state government and public land sales. Three extensions were built as funding permitted. Last summer, ground was broken for a 3.3-mile extension that will connect downtown to the east bank of the Willamette River. The new line will bisect a mostly underused, industrial neighborhood ripe for redevelopment. The extension will cost \$148.27 million. \$75 million will be provided by a now supportive Federal Government. The new line is expected to open in early 2012.

[Source: Buffalo Rising, April 19, 2010]

Printed July 7, 2010