



POWER DISTRIBUTION

Design and Construction of 110kV sub-stations in partnership with **ABB**

Nicholas O'Dwyer were the lead Civil / Structural Engineers and Construction Manager for the civil / structural works, for many HV substation projects in recent years, including Conoco Phillips (Irish Refinery), Amgen Pharmaceutical, Dublin Airport and Microsoft Grangecastle.

The projects involved the design and construction of a new 110kV to 20kV client sub-stations including transformer bunds, pylon foundations, plinths, roadways, drainage and all civil engineering works. Nicholas O'Dwyer were also responsible for all cable phasing drawings and diversions into either existing or new sub-station buildings.

In the case of Conoco Phillips, construction works took place adjacent to the existing 'live' sub-station and included very carefully planned works during a limited two week shut-down period at the refinery. Although strictly outside the refinery boundary, the client insisted on full implementation of their health and safety policy for works in a restrictive environment.

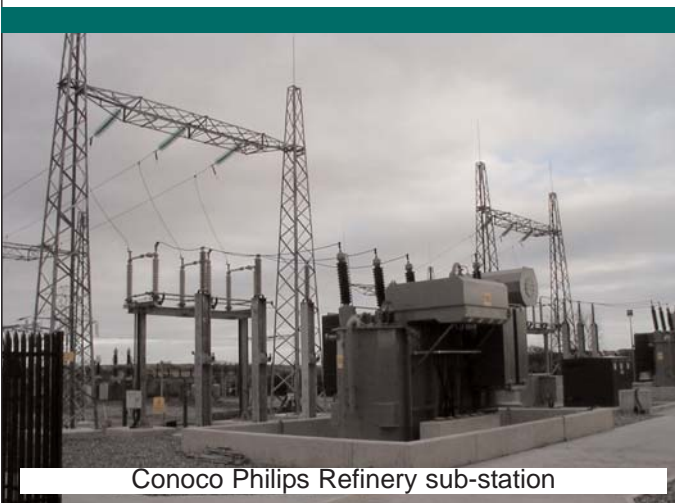


Dublin Airport 20kV sub-station design and build

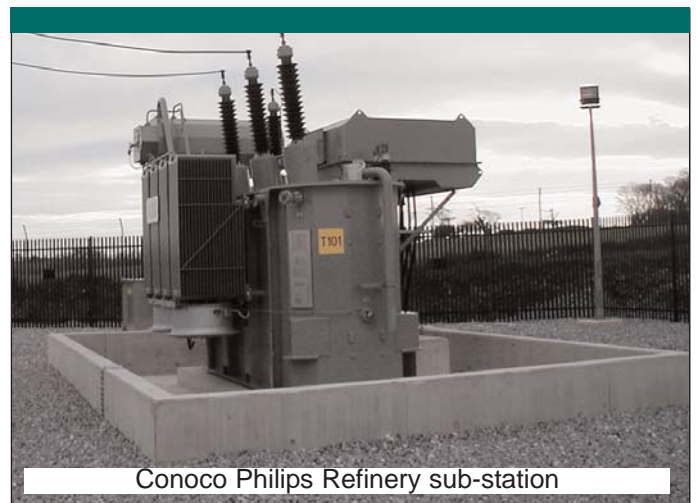
On the Dublin Airport project, Nicholas O'Dwyer were employed by Pierse Contracting Ltd., as lead Civil / Structural Engineers and Project Co-ordinator for the civil / structural works. The project is a Design and Build contract incorporating approval periods for detailed design submissions.

The project involved the construction of a new 110kV to 20kV client sub-station including transformer bunds, plinths, roadways, drainage and all civil engineering works. Nicholas O'Dwyer were also responsible for all cable phasing drawings between the new Eirgrid building and client sub-station building.

Co-ordinated interface design with the Eirgrid sub-station has also been completed by means of interface meetings and drawing exchange.



Conoco Phillips Refinery sub-station



Conoco Phillips Refinery sub-station



Nicholas O'Dwyer
CONSULTING ENGINEERS