

Worldwide Study Of The Protective Relay Marketplace In Electric Utilities: 2009-2011

VOLUME II : INTERNATIONAL MARKET

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Section 1: Introduction

Introduction to the Report

The international utilities participating in this 2009 survey represented countries with approximately 3 billion residents, nearly one half of the world total. In several instances, the respondent utilities represented all electricity end-users within their countries for at least some aspect of power generation, transmission or delivery. For example, Saudi Electric, Fingrid (Finland), EDP (Portugal), AES Eletropaulo (Brazil), TransGrid (Australia), and Taiwan Power Company are representative of respondents from such national power transmission and delivery organizations.

These participating international utilities had relay purchase plans that indicate as many as 17,300 relays would be purchased over the 2009-2011 timeframe.

The number of international utility protection and control engineers and engineering managers participating in this Newton-Evans protective relay study series was a few more than had participated in the three most recent earlier studies.

Keep in mind that the global *electric utility share* of the direct sales portion of the market for protective relaying products forms only about 45-55% of the total protective relay market. Additional volume unit shipments go to OEMs, to independent power producers (IPPs), including cogeneration sites and merchant power plants, as well as to industrial and commercial generators, energy project managers (i.e., substation construction firms) and commercial and industrial end-users of electricity.

Volume 1 in this new series, North American Protective Relay Market, has now been released. The Supplier Profiles volume (Volume 3 of this report series) provides readers with profiles of the leading global participants in the protective relay business. Volume 4 of this series, the World Market Assessment, provides market-sizing estimates for the relay marketplace comprised of the world's electric utilities.

Excerpts from the 2006 International Relay Study Notes:

The international utilities participating in the 2006 survey represented countries with approximately 1.5 billion residents. In several instances, the respondent utilities represented all electricity end-users within their countries for at least some aspect of power generation, transmission or delivery. For example, National Grid Transco (UK), ESB (Republic of Ireland), EDP (Portugal), ElectroPeru (Peru), Transpower (Australia), and Eskom (South Africa) are representative of respondents from such national power transmission and delivery organizations.

These participating international utilities had relay purchase plans that indicate as many as 17,300 relays would be purchased over the 2006-2008 timeframe.

The number of international utility protection and control engineers and engineering managers participating in this Newton-Evans protective relay study series remained at about the same level as participated in the two most recent earlier studies, but total respondents increases with the addition of two industrial company respondents.

Importantly, Newton-Evans obtained slightly better international cooperation in 2006 than in earlier surveys of Protection and Control engineers, even though the number of questions asked in the international survey was more than the number asked in the 2004 study.

Excerpts from the 2002 International Relay Study Notes:

The international utilities participating in the 2002 survey represented countries with approximately 500 million residents. In several instances, the respondent utilities represented all served customers within their countries for at least some aspect of power generation, transmission or delivery. Such utilities included Statnett, EDP, CEL, Transpower, EGAT, EAC, Egyptian Electricity Transmission Company, NRI, Senelec, National Power Authority, and SEB.

These participating international utilities had relay purchase plans that indicated as many as 17,000 relays would be purchased over the 2002-2005 time frame.

The number of international utility protection and control engineers and engineering managers participating in this Newton-Evans protective relay study series remained at about the same level as participated in the 1999-2000 study, with the exception that the 2002 study did not include participation from Russian energos, which made up a large portion of the total respondents in the earlier international study.

Section 2: Narrative and Charts

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