

***WORLDWIDE STUDY  
OF  
PROTECTIVE RELAY MARKETPLACE  
IN  
ELECTRIC UTILITIES: 2006-2008***

***VOLUME II***

**INTERNATIONAL MARKET**

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## SECTION 1

### Introduction to the Report

The international utilities participating in this 2006 survey represented countries with approximately 1.75 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 was somewhat higher than in the two most recent earlier studies, and total respondents increases with the addition of several Caribbean island nations.

Keep in mind that the global *electric utility portion* 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.

The **Executive Summary** volume will provide readers with profiles of the leading global participants in the protective relay business. Volume 3 of this series, the **World Market Assessment** will provide market-sizing estimates for the relay marketplace comprised of the world's electric utilities.

### **Excerpts from the 2004 International Relay Study Notes:**

The international utilities participating in the 2004 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 9,000 relays would be purchased over the 2004-2006 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 this year, even though the number of questions asked in the international survey was twice the number asked in the 2002 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.

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