# **CFN Certification Environment Access Request**

Firm Name:	
Address:	
E-Mail Address:	
VPN Info:	
Peer IP Address: _	
Device Type: _	
E-Mail Address:	

Please complete this form and send to cfn@cboe.com.

### **CFN VPN Connectivity Guide**

This guide details how to setup an IPSec VPN tunnel with CFN in order to receive multicast data for testing and certification purposes. Please complete the CFN Certification Environment Access Request form and submit to cfn@cboe.com.

#### For ISAKMP, please use:

- 3DES for key encryption
- a hash algorithm of MD5 for data integrity
- Diffie-Hellman group 2
- An SA lifetime of 86,400 seconds with no volume limit (Cisco default)
- a preshared key of (a preshared key assigned by CBOE technical staff)
- aggressive mode turned off (Cisco default)

#### For IPSEC, please use:

- ESP-3DES for encryption and data integrity
- a hash algorithm of ESP-MD5 for data integrity
- no compression method (Cisco default)
- a lifetime of 3600 seconds with a volume limit of 4,608,000 kilobytes (Cisco default) The VPN Peer address for the CBOE is 198.160.148.45

The CBOE will configure this connection during the next available maintenance window: After network connectivity has been established, please contact the API Group at CBOE for certification assistance.

API Group can be contacted as follows:

Phone: 312-786-7300 Email: api@cboe.com

## **Customer Cisco Router Configuration – Sample**

```
ip multicast-routing
crypto isakmp policy 2
encr 3des
hash md5
group 2
authentication pre-share
crypto isakmp key (assigned by CBOE separately) address 198.160.148.45
crypto ipsec transform-set cboevpn esp-3des esp-md5-hmac
crypto map cboevpn 1 ipsec-isakmp
set peer 198.160.148.45
set transform-set cboevpn
match address 100
interface Loopback0
ip address x.x.x.x 255.255.255.255 (assigned by CBOE)
interface Tunnel0
ip address x.x.x.x 255.255.255.252 (assigned by CBOE)
ip pim sparse-mode (required for CSM access)
tunnel source x.x.x.x (assigned by CBOE)
tunnel destination 10.239.4.1 (CBOE source)
interface fa0/0
ip address (IP/Subnet mask of internal network)
ip pim sparse-mode (required for CSM access)
duplex auto
speed auto
no cdp enable
interface fa0/1
ip address (firm outside public IP)
crypto map cboevpn
ip route 170.137.255.14 255.255.255.255 (CBOE RP) Tunnel0
ip route 170.137.253.114 255.255.255.255 (CBOE CSM source) Tunnel0
ip route 170.137.253.116 255.255.255.255 (CBOE CSM source) Tunnel0
ip classless
no ip http server
no ip http secure-server
ip pim rp-address 170.137.255.14 CSM-GROUPS override #(required for CSM access)
access-list 100 permit gre host x.x.x.x (Loop0 IP) host 10.239.4.1 #(required for CSM access )
ip access-list standard CSM-GROUPS
permit 233.65.120.240 0.0.0.15
```

<sup>\*\*</sup>Please make sure to allow CBOE vpn address 198.160.148.45 in from the internet for isakmp and esp ports.