MainActivity.java

```java
package com.example.broadcastpowerreciver;

import androidx.appcompat.app.AppCompatActivity;
import androidx.localbroadcastmanager.content.LocalBroadcastManager;

import android.content.Intent;
import android.content.IntentFilter;
import android.os.Bundle;
import android.view.View;

public class MainActivity extends AppCompatActivity {

    public static final String ACTION_CUSTOM_BROADCAST =
            BuildConfig.APPLICATION_ID + ".ACTION_CUSTOM_BROADCAST";

    MyPowerReceiver mPowerReceiver;


    @Override
    protected void onCreate(Bundle savedInstanceState) {
        super.onCreate(savedInstanceState);
        setContentView(R.layout.activity_main);

        mPowerReceiver = new MyPowerReceiver();

        IntentFilter filter = new IntentFilter();
        filter.addAction(Intent.ACTION_POWER_CONNECTED);
        filter.addAction(Intent.ACTION_POWER_DISCONNECTED);

        this.registerReceiver(mPowerReceiver, filter);


        LocalBroadcastManager.getInstance(this)
                .registerReceiver(mPowerReceiver,
                        new IntentFilter(ACTION_CUSTOM_BROADCAST));


    }

    @Override
    protected void onDestroy() {
        this.unregisterReceiver(mPowerReceiver);
        LocalBroadcastManager.getInstance(this)
                .unregisterReceiver(mPowerReceiver);
        super.onDestroy();
    }

    public void sendCustomBroadcast(View view) {
        Intent customBroadcastIntent = new Intent(ACTION_CUSTOM_BROADCAST);

        LocalBroadcastManager.getInstance(this)
                .sendBroadcast(customBroadcastIntent);

    }
```

```
}
```

activity_main.xml

```xml
<?xml version="1.0" encoding="utf-8"?>
<androidx.constraintlayout.widget.ConstraintLayout
xmlns:android="http://schemas.android.com/apk/res/android"
    xmlns:app="http://schemas.android.com/apk/res-auto"
    xmlns:tools="http://schemas.android.com/tools"
    android:layout_width="match_parent"
    android:layout_height="match_parent"
    tools:context=".MainActivity">

    <TextView
        android:id="@+id/textView"
        android:layout_width="wrap_content"
        android:layout_height="wrap_content"
        android:text="Hello World!"
        app:layout_constraintBottom_toBottomOf="parent"
        app:layout_constraintEnd_toEndOf="parent"
        app:layout_constraintStart_toStartOf="parent"
        app:layout_constraintTop_toTopOf="parent" />

    <Button
        android:id="@+id/button_send_broadcast"
        android:layout_width="wrap_content"
        android:layout_height="wrap_content"
        android:text="Send Custom Broadcast"
        android:onClick="sendCustomBroadcast"
        app:layout_constraintBottom_toBottomOf="parent"
        app:layout_constraintEnd_toEndOf="parent"
        app:layout_constraintStart_toStartOf="parent"
        app:layout_constraintTop_toBottomOf="@+id/textView" />

</androidx.constraintlayout.widget.ConstraintLayout>
```

MyPowerRecevier.java

```java
package com.example.broadcastpowerreciver;

import static android.content.Intent.*;

import static
com.example.broadcastpowerreciver.MainActivity.ACTION_CUSTOM_BROADCAST;

import android.content.BroadcastReceiver;
```

```java
import android.content.Context;
import android.content.Intent;
import android.widget.Toast;

public class MyPowerReceiver extends BroadcastReceiver {

    @Override
    public void onReceive(Context context, Intent intent) {

        String intentAction = intent.getAction();
        String toastMessage = "Unknown Intent Action";

        if (intentAction != null) {
            switch (intentAction){

                case Intent.ACTION_POWER_CONNECTED:
                    toastMessage = "Power connected";
                    break;
                case Intent.ACTION_POWER_DISCONNECTED:
                    toastMessage = "Power disconnected";
                    break;
                case ACTION_CUSTOM_BROADCAST:
                    toastMessage = "Custom Broadcast Received";
                    break;
            }

            Toast.makeText(context, toastMessage,Toast.LENGTH_SHORT ).show();
        }
    }
}
```

Top screenshot — MyPowerReceiver.java:

```java
public class MyPowerReceiver extends BroadcastReceiver {

    @Override
    public void onReceive(Context context, Intent intent) {

        String intentAction = intent.getAction();
        String toastMessage = "Unknown Intent Action";

        if (intentAction != null) {
            switch (intentAction){

                case Intent.ACTION_POWER_CONNECTED:
                    toastMessage = "Power connected";
                    break;
                case Intent.ACTION_POWER_DISCONNECTED:
                    toastMessage = "Power disconnected";
                    break;
            }

            Toast.makeText(context, toastMessage,Toast.LENGTH_SHORT ).show();
        }
    }
}
```

Bottom screenshot — MainActivity.java:

```java
package com.example.broadcastpowerreciver;

import ...

public class MainActivity extends AppCompatActivity {

    private static final String ACTION_CUSTOM_BROADCAST =
            BuildConfig.APPLICATION_ID + ".ACTION_CUSTOM_BROADCAST";

    MyPowerReceiver mPowerReceiver;


    @Override
    protected void onCreate(Bundle savedInstanceState) {
        super.onCreate(savedInstanceState);
        setContentView(R.layout.activity_main);

        mPowerReceiver = new MyPowerReceiver();

        IntentFilter filter = new IntentFilter();
        filter.addAction(Intent.ACTION_POWER_CONNECTED);
        filter.addAction(Intent.ACTION_POWER_DISCONNECTED);
```

Build output:
```
C:\Users\hasegawa001\AndroidStudioProjects\BroadcastPowerReciver\app\src\main\java\com\example\broadcastpowerreciver\MainActivity.java:11: error: cann
    PowerBroadcastReceiver mPowerReceiver;
    ^
symbol:   class PowerBroadcastReceiver
location: class MainActivity
```

cannot find symbol class PowerBroadcastReceiver :11
cannot find symbol class PowerBroadcastReceiver :19

```java
        @Override
        public void onReceive(Context context, Intent intent) {

            String intentAction = intent.getAction();
            String toastMessage = "Unknown Intent Action";

            if (intentAction != null) {
                switch (intentAction){

                    case Intent.ACTION_POWER_CONNECTED:
                        toastMessage = "Power connected";
                        break;
                    case Intent.ACTION_POWER_DISCONNECTED:
                        toastMessage = "Power disconnected";
                        break;
                    case ACTION_CUSTOM_BROADCAST:
                        toastMessage = "Custom Broadcast Received";
                        break;
                }

                Toast.makeText(context, toastMessage,Toast.LENGTH_SHORT ).show();
            }
        }
}
```

```java
package com.example.broadcastpowerreciver;

import ...

public class MainActivity extends AppCompatActivity {

    public static final String ACTION_CUSTOM_BROADCAST =
            BuildConfig.APPLICATION_ID + ".ACTION_CUSTOM_BROADCAST";

    MyPowerReceiver mPowerReceiver;


    @Override
    protected void onCreate(Bundle savedInstanceState) {
        super.onCreate(savedInstanceState);
        setContentView(R.layout.activity_main);

        mPowerReceiver = new MyPowerReceiver();

        IntentFilter filter = new IntentFilter();
        filter.addAction(Intent.ACTION_POWER_CONNECTED);
        filter.addAction(Intent.ACTION_POWER_DISCONNECTED);
```