

NonlinearFormIntegrator

```
classDiagram
    class NonlinearFormIntegrator {
    }
    class PoissonNLFIntegrator {
        +PoissonNLFIntegrator()
        +AssembleElementVector()
        +AssembleElementGrad()
    }
    NonlinearFormIntegrator <|-- PoissonNLFIntegrator
```

The diagram illustrates a class hierarchy. At the top is the 'NonlinearFormIntegrator' class, represented by a white box with a black border and two empty internal compartments. Below it is the 'PoissonNLFIntegrator' class, represented by a gray box with a black border and three compartments. The top compartment of the gray box contains the class name. The bottom compartment contains three method signatures, each preceded by a plus sign: '+ PoissonNLFIntegrator()', '+ AssembleElementVector()', and '+ AssembleElementGrad()'. A blue arrow with an open triangular head points from the top of the gray box to the bottom of the white box, indicating that 'PoissonNLFIntegrator' inherits from 'NonlinearFormIntegrator'.

PoissonNLFIntegrator

+ PoissonNLFIntegrator()  
+ AssembleElementVector()  
+ AssembleElementGrad()