



HAND DELIVERED

12 January 10

Utah Division of Water Rights  
Utah State Engineer  
1594 North Temple, Suite 220  
P.O. Box 146300  
Salt Lake City, Utah 84114-6300

HEARING SUBMITTAL TO  
DIVISION OF WATER RIGHTS

Right No.: a 35402 & a 35874

Date: 1/12/2010

Submitter: Protestant  
Center for Biological Diversity

38 Pages

RE: TESTIMONY BEFORE THE UTAH DIVISION OF WATER RIGHTS  
TUESDAY, JANUARY 12, 2010 IN THE JOHN WESLEY POWELL  
MUSEUM LOCATED AT 1765 EAST MAIN, GREEN RIVER, UTAH,  
PURSUANT TO UTAH ADMINISTRATIVE CODE R655-6, R655-6-11,  
R655-6-12 AND R655-6-14, REGARDING CHANGE APPLICATIONS  
A35874 AND A35402 AND WATER RIGHTS 09-462 AND 89-74.

Dear Sirs and Madams:

Thank you for the opportunity to provide testimony on the subject change applications and water rights.

The Center for Biological Diversity ("Center") is a non-profit, public interest environmental organization dedicated to the protection of native species and their habitats through science, policy, and environmental law. The Center has over 240,000 members and on-line activists throughout Utah, Arizona, Nevada, Colorado, California and the United States.

On behalf of the Center, please accept the following testimony relating to (1) change application a35874 submitted by San Juan County Water Conservancy District for water right 09-462 and (2) and change application a35402 submitted by Kane County Water Conservancy District for water right 89-74, both to facilitate and support the construction of a nuclear power plant in Emery County near the town of Green River. The Center protested application a35874 before the Utah Division of Water Rights in October 2009 and protested application a35402 before the Division in May 2009; the Center is thus a formal protestant of both applications under Utah Statute, R655-2-1.

As set forth in those protests, the nature, design and requirements of the proposed nuclear power plant remain almost completely unknown based on the information available to the public. The public is informed by (1) application a35874 that a water right diversion is requested to be moved from San Juan County near Mexican Hat to Emery County and the Green River in the amount of 24,000 acre-feet, and (2) application a35402 that a water right diversion is requested to be moved from Kane County and Lake Powell to Emery County and the Green River in the

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amount of 29,600 acre-feet—both applications for the proposed purpose of constructing the Blue Castle Project nuclear power plant with an estimated capacity of 1500 to 3000 megawatts.

We are also informed that a 100 acre, 2,000 acre feet holding pond will be constructed to support the nuclear plant's needs. Beyond this we know nothing of the plants design, hourly, daily or yearly water requirements, expected project life, plan for the disposal of wastes, safety designs, or other environmental protections or mitigations.

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However, the change in point of diversion would result in water being taken from the Green River near the town of Green River. The Green River is critically important habitat for several imperiled species of fish, including the following species which are federally protected as Endangered under the Endangered Species Act: bonytail (*Gila elegans*), Colorado pikeminnow (*Ptychocheilus lucius*), humpback chub (*Gila cypha*) and razorback sucker (*Xyrauchen texanus*).

We are concerned that individuals of these species, particularly juveniles, could be killed or harmed, which is prohibited "take" under the Endangered Species Act<sup>1</sup>, by mean of their ingestion into the intakes for the nuclear plant. Such plants require vast amounts water during normal operations to absorb the waste heat left after making electricity, and to cool the reactor, equipment and buildings used in generating that electricity or for use in emergencies. The proposed plant is envisioned to being capable of producing 1500-3000 megawatts of electricity. Studies cite that a modern 1600 megawatt plant requires about 1,144,000 gallons of water per minute for once-through cooling.<sup>2</sup>

While screens and filters are used, the water pressure from such voluminous intake traps aquatic life in and against the filters resulting in their death. There is also potential take associated with the discharge of the cooling water back into the river. The warm discharge water alters the downstream habitat making it potentially unsuitable for the fish of concern. The impacts of reducing river flows and altering aquatic habitat characteristics during periods of drought may also result in take of some or all of the above species. In light of these impacts, the use of this water in this way will require an "incidental take permit" pursuant to section 10 of the Endangered Species Act.<sup>3</sup>

The Green River also provides habitat to the roundtail chub (*Gila robusta*), blueheaded sucker (*Catostomus discobolus*) and flannelmouth sucker (*Catostomus latipinnis*), all of which are species receiving special management under a Conservation Agreement in order to preclude the need for Federal listing.<sup>4</sup> These species also could be adversely affected by the water diversion in the ways described above.

The Center is also concerned about the impacts of the disturbances from the power plant

<sup>1</sup> The term "take" means "to harass, harm, pursue, hunt, shoot, would, kill, trap, capture, or collect, or to attempt to engage in any such conduct". 16 U.S.C. § 1532(19).

<sup>2</sup> Union of Concerned Scientists, 2009. Issue Brief - Got Water? Nuclear Power Plant Cooling Water Needs. Accessed 11 January 2010 at:

[http://www.ucsusa.org/nuclear\\_power/nuclear\\_power\\_technology/got-water-nuclear-power.html](http://www.ucsusa.org/nuclear_power/nuclear_power_technology/got-water-nuclear-power.html).

<sup>3</sup> 16 U.S.C. § 1539

<sup>4</sup> Utah Conservation Data Center. Accessed 11 January 2010 at: <http://dwredc.nr.utah.gov/ucdc/ViewReports/sscounty.htm>

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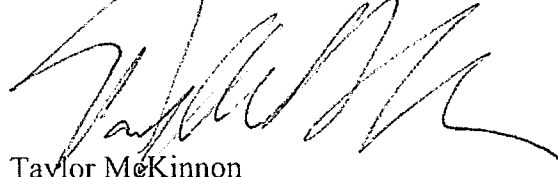
and reservoir upon terrestrial species protected under the ESA that are found in the general vicinity of the project's location. The San Rafael cactus (*Pediocactus despainii*) is listed as Endangered, while the Jones's cycladenia (*Cyladenia jonesii*) and the Maguire's daisy (*Erigeron maguirei*) are listed as Threatened.<sup>5</sup> Any Take of these species would fall under similar requirements for an Incidental Take Permit under the ESA.

Furthermore, the kit fox (*Vulpes macrotis*), white-tailed prairie dog (*Cynomys leucurus*), ferruginous hawk (*Buteo regalis*) and corn snake (*Elaphe guttata*) – all Utah species of concern – are reported to occur at or near to the proposed power plant and ancillary facilities and could be impacted by their construction and operation.<sup>6</sup>

The Center asserts that the needs of federally and state protected wildlife and plant species and the maintenance of the natural condition of their habitats imposes a significant beneficial use consideration under Utah Code at 73-3-8 (ii) and 73-3-8 (v)(b)(i).

We respectfully ask that you consider our concerns in any further evaluation of the two applications. We further request that you keep the record open for a period of 90 days following today's hearing in order for parties and the public to provide the Division additional evidence and testimony relating to both applications.

Thank you for your consideration in this matter.



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<sup>5</sup> Utah Sensitive Species List, December 14, 2007. Accessed 11 January 2010 at: <http://dwrcdc.nr.utah.gov/ucdc/viewreports/sslist.htm>

<sup>6</sup> *ibid*

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